DESCRIPTIONS OF 64 SITES ON PROPOSED UPDATE #6 TO NATIONAL PRIORITIES LIST

This document consists of descriptions of the 64 sites proposed in December 1986 as Update #6 to the National Priorities List (NPL). In most cases, the size of the site is indicated on the basis of presently available information. The size may change in the future as additional information is gathered on the extent of contamination.

All sites are arranged alphabetically by State and by site.

Remedial Actions Under Superfund

Superfund is a national Trust Fund authorized by the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCIA) and by the Superfund Amendments and Reauthorization Act of 1986 (SARA). The Fund pays the costs not assumed by responsible parties for cleaning up abandoned or uncontrolled hazardous waste sites that threaten public health, welfare, or the environment. The Superfund program is managed by the U.S. Environmental Protection Amency (EPA). Two types of responses may be taken when a hazardous substance is released (or threatens to be released) into the environment:

Removal actions, emergency-type responses to imminent threats. Typically, these actions were formerly limited to 6 months and/or \$1 million. Under SARA, the limits are 1 year and/or \$2 million, with a waiver possible if the actions are consistent with remedial actions. Removal actions can be undertaken by the private parties responsible for the release or by the Federal Government using the Trust Fund.

Remedial responses, actions intended to provide permanent solutions at hazardous waste sites. They are generally longer-term and more expensive than removals. A Superfund remedial response can be taken only if a site is on the NPL. After publishing two preliminary lists and proposing a formal list, EPA published the first NPL in September 1983. CERCLA requires that the list be updated at least annually.

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

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

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

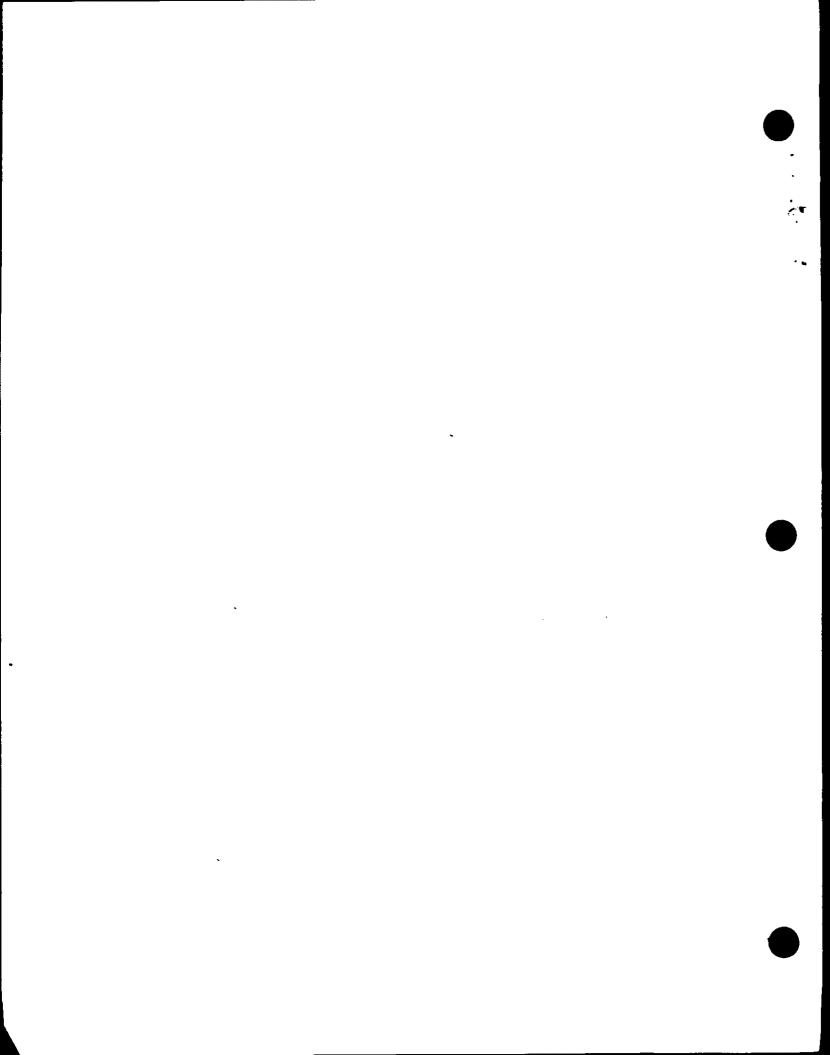
- o Taking any measures needed to stabilize conditions, which might involve, for example, fencing the site or removing above—ground drums or bulk tanks. Such measures usually would be required in the later phases of cleanup.
- o Undertaking initial planning activities, which involve collecting all the information needed to develop a coherent strategy and to assist in selecting an appropriate course of action.
- o 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 \$875,000 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 for a reasonable cost.
- o Designing the remedy. Typically, the design phase costs \$850,000 and takes 6 to 12 months.
- o Implementing the remedy, which might involve, for example, constructing facilities to treat ground water or removing con-

taminants to a safe disposal area away from the site. The implementation phase typically lasts 6 to 12 months.

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

- o 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 workplan, schedule, and budget, contracts for any services it needs, and is responsible for making sure that all the conditions in the cooperative agreement are met. In contrast to a grant, EPA continues to be substantially involved and monitors the State's progress throughout the project.
- o 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 responses to average out at about \$8.6 million per site.



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

JACKSONVILLE MUNICIPAL LANDFILL Jacksonville, Arkansas

The Jacksonville Municipal Landfill covers approximately 80-acres on Graham Road in Jacksonville, Arkansas, just inside the Lonoke County line. The city purchased the site in June 1960 and operated it as a municipal landfill until 1973. It had no permit and kept no records of the wastes it accepted. The landfill closed when the Arkansas Department of Pollution Control and Ecology turned down an application for a permit.

According to a former county employee, wastes were at first burned, prompting citizen complaints about odors. Later, wastes were dumped into unlined trenches as deep as 25 feet. No cover was applied at the end of the day. In addition to municipal waste, the landfill accepted drums of industrial and chemical waste.

On-site soil and the drums are contaminated with 2,3,7,8-tetrachlorodibenzo (p) dioxin, PCB-1260, 4,4-DDT, and heptachlor epoxide, according to EPA tests. During an inspection in 1983, EPA observed about 20 rusting drums and a strong chemical odor. As many as 1,000 drums may be on the site. Until mid-1985, access to the site was unrestricted, and children had been observed playing in the landfill. Drums had washed off-site onto neighboring residential properties.

Ground water is shallow (5 feet). An estimated 10,100 people draw drinking water from public and private wells within 3 miles of the site. A private well is 1,320 feet from the site.

Drainage on the site is poor, allowing water to pond. There is no diversion system, so that run-off can leave the site. During heavy rains, the landfill floods.

In early 1986, the City of Jacksonville fenced the site to prevent public access.

The Jacksonville Municipal Landfill is within 0.5 miles of the Rogers Road Municipal Landfill, which is also being proposed for the NPL at this time.

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

ROGERS ROAD MUNICIPAL LANDFILL Jacksonville, Arkansas

The Rogers Road Municipal Landfill covers approximately 10 acres on Rogers Road in Jacksonville, Arkansas, just inside the Pulaski County line. The city purchased the site on September 16, 1953, and operated it as a municipal landfill until October 1974. It had no permit and kept no records of the wastes it accepted. The landfill closed when the Arkansas Department of Pollution Control and Ecology turned down an application for a permit. Based on the terms of the purchase contract, ownership of the property reverted back to the original owner (now deceased).

In May 1985, while sampling the Jacksonville Municipal Landfill (which is also being proposed for the NPL at this time), EPA received a complaint from a citizen regarding the Rogers Road Municipal Landfill 0.5 miles away. EPA visited the landfill, and two weeks later conducted a site inspection. A lagoon was found, as well as about 30 deteriorating drums giving off a strong chemical odor. Soil around the drums and lagoons, as well as the run-off paths, appeared contaminated. In addition to municipal waste, the landfill accepted industrial and chemical waste.

On-site soil and the drums are contaminated with 2,4-D, 2,4,5-T, dioxin, PCB (Aroclor-1254), and trichloroethene, according to tests conducted by EPA.

The landfill had no liner. Drainage is poor, allowing water to pond. Ground water is shallow (5 feet). Wastes are deposited as deep as 20 feet. An estimated 10,100 people draw drinking water from public and private wells within 3 miles of the site. A private well is 2,640 feet from the site.

In early 1986, the City of Jacksonville fenced the site to prevent public access.

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

SOUTHERN CALIFORNIA EDISON CO. (VISALIA POLEYARD) Visalia, California

Southern California Edison Co. (SCE) treated utility poles on a 20-acre site in Visalia, Tulare County, California, from the 1920s until 1980. Wood preservatives, including creosote and pentachorophenol (PCP), were used and stored on-site during the poleyard's operations. Leaking tanks and stored treated poles have contaminated ground water and soil with wood-treatment chemicals, as well as associated hexa-,hepta-, and octa-chlorodioxins and furans, according to analyses conducted by both the Regional Water Quality Control Board in Fresno (RWOCB) and SCE.

California Water Service Co. wells within 3 miles of the site supply drinking water to the City of Visalia, population 59,000. After sampling ground water and soil in May 1976, RVQCB in Fresno issued a Cleanup and Abatement Order requiring SCE to (1) abate discharge of treating fluids into the soil, (2) contain contaminated soil and water on the property, (3) pump shallow ground water under the site before and during construction of an underground slurry wall around the site, (4) pump the lower confined aquifer to remove contamination, and (5) clean up contaminated shallow ground water off-site.

In response to the order, SCE removed 2,300 cubic yards of grossly contaminated soil to an approved Class I disposal site. The remaining soil was not sampled after the cleanup. In 1977, a 60-foot-deep cement-bentonite slurry wall was constructed to slow lateral migration of the shallow aquifer. Currently, SCE is pumping the shallow wells, treating the water by carbon filtration, and discharging it into the city sewer system. On a quarterly basis, SCE has been sampling monitoring wells along with California Water Service Co. wells. The results indicate that on-site monitoring wells contain up to 12 ppm PCP, and off-site monitoring wells contain up to 0.15 ppm PCP.

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

WATKINS-JOHNSON CO. (STEWART DIVISION PLANT)
Scotts Valley California

The Watkins-Johnson Co. (Stewart Division Plant) has manufactured industrial furnaces and electrical parts since 1965 on a 3-acre site in Scotts Valley, Santa Cruz County, California. The Regional Water Quality Control Poard and Watkins-Johnson's consultant have detected organic chemicals, including trichloroethene, trichloroethane, tetrachloroethene, dichloroethene, and Freon in soil and ground water on the site. The contamination is apparently the result of improper handling of hazardous waste.

Early in July 1986, the California Regional Water Quality Control Board issued Waste Discharge Requirements to the company. The requirements are the board's legal mechanism for regulating activities at facilities under its jurisdiction. Later in July, the board issued a cleanup and abatement order. Watkins-Johnson has begun an interim program to pump and treat contaminated ground water.

Wells within 3 miles of the site draw on the Santa Margarita Aquifer, designated by EPA as a "sole source" of drinking water in the area. An estimated 12,000 people use the wells.

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

NUTMEG VALLEY ROAD Wolcott, Connecticut

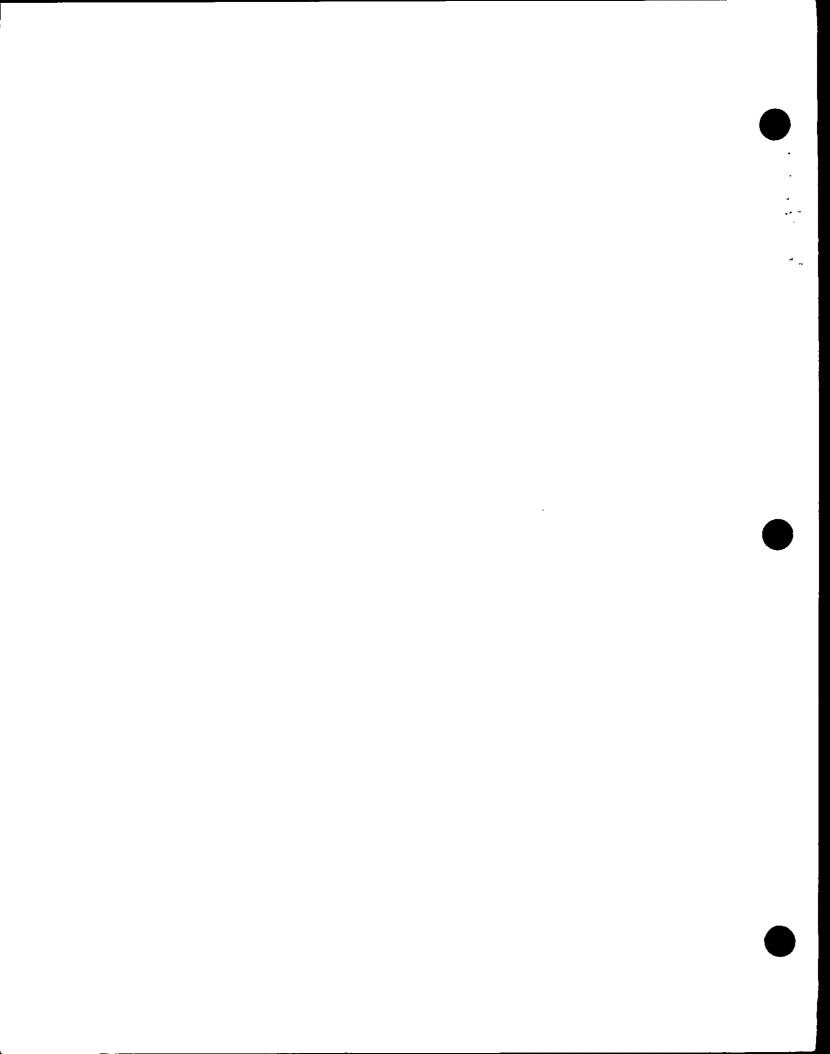
The Nutmeg Valley Road Site is in southwest Connecticut in the Town of Wolcott, New Haven County. Investigation of this site centers around Nutmeg Screw Machine Products Co. (NSMP), which covers 3.5 acres on Nutmeg Valley Road in the western portion of Wolcott (population, 13,000) and 0.25 miles northeast of Waterbury (population 103,800). The area around the site is both rural residential and light industrial, with a number of other metal-working and metal-finishing shops in the immediate vicinity, including Waterbury Heat Treating Corp. (WHTC) and Alpine Electronic Components, Inc. (AEC). WHTC is 300 feet to the northwest of NSMP and performs various heat-treating operations (annealing and hardening) on metal articles. AEC leases a portion of the NSMP building in which it machines metal parts and performs degreasing, polishing, acid dipping, and assembly functions.

NSMP is a small (9-30 employees) metal-working and machine shop that has been in business since 1951. Substances used in the machining processes include a kerosene-like cutting oil, machine lubrication oils, and carbon tetrachloride (for cleaning and degreasing). Carbon tetrachloride and cutting oils were dumped onto the ground at an estimated rate of up to 15 gallons per day, according to the Connecticut Department of Environmental Protection (CT DEP). This practice was followed for between 14 and 20 years, ceasing by 1980.

Soil adjacent to the shop building contains volatile organic chemicals and metals, including lead and copper, according to analyses conducted by EPA. No contamination was detected in water and sediment in Old Tannery Brook 300 feet from the site. A fresh-water wetland is approximately 600 feet downstream from the site.

Local surficial deposits, primarily sand and gravel, are relatively permeable, facilitating movement of contaminants into ground water. About 10,500 people draw drinking water from private wells within 3 miles of the site.

EPA has conducted preliminary assessments at all three companies and site inspections at NSMP and WHTC. Further investigation is required to more fully define the quantities of contaminants present in the soil and to evaluate the underlying ground water.



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

CHEM-SOLV, INC. Cheswold, Delaware

Chem-Solv, Inc., started a small solvent distillation facility in 1982 on a 1.5-acre site in Cheswold, Kent County, Delaware. The company recycled waste solvents by placing a drum on an electric coil heater, which distilled the solvents into a second drum. The contents of the second drum were filtered into a third drum, which was returned to the customer. The residues remaining after distillation were classified as hazardous waste under Subtitle C of the Resource Conservation and Recovery Act (RCRA) and were stored on-site.

On September 7, 1984, an explosion and fire at the site destroyed the entire distillation facility. At the time, witnesses observed fluids flowing off a concrete pad into the soil. On September 21, 1984 and again on January 31, 1985, the Delaware Department of Natural Resources and Environmental Control (DNREC) issued orders under State law calling on the company to cease operations immediately, monitor ground water, and remove all contaminated soil. The company failed to take any action.

Subsequent analyses conducted by DNREC detected high concentrations of organic chemicals, including trichloroethylene, l,l,l-trichloroethane, and l,l-dichloroethane, in soils and ground water on and off the site. Both the upper and lower zones of the Columbia aquifer are contaminated. About 5,500 residents are served by private wells within 3 miles of the site.

In September 1985, DNREC excavated contaminated soil and began using a treatment process that passes air through the soil to remove the volatile organic contaminants. The air-stripping process should reduce contamination to levels that permit returning the soil to the excavated area. Later in the year, DNREC plans to install an air-stripping system to remove volatile organic contaminants from ground water. DNREC has filed suit against Chem-Solv to recover the money it has spent. The company has declared itself financially insolvent.

In 1984 and 1985, the State issued two orders requiring Chem-Solv to begin remedial action at the site. The company refused to comply.

When Chem-Solv started operations, it filed Part A of a permit application under RCRA, giving the company Interim Status as a storage facility. On August 6, 1985, DNREC made a final decision to deny Chem-Solv the storage permit.

Because Chem-Solv, Inc., has lost Interim Status (and hence authorization to operate) and there are additional indications that the owner or operator will be unwilling to undertake corrective action, it meets the second component of EPA's policy for listing RCRA-related sites.

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

DOVER GAS LIGHT CO. Dover, Delaware

Dover Gas Light Co. operated a coal gasification plant on a 0.9-acre site in Dover, Kent County, Delaware, from 1859 to 1948. The plant processed coal to produce a gas that was piped to street lamps in Dover. When the plant closed, the structures, except for a brick garage, were demolished. Steel and iron scrap were removed; all other materials, including coal oil, coal tar, coke, and an unknown kind of acid, were buried on the site.

In 1984, during geotechnical studies of the property prior to construction of the new Kent County Family Courthouse, remains of this coal gasification plant were discovered buried on site. The buried materials include coal tar residues containing hazardous substances.

The Delaware Department of Natural Resources and Environmental Control (DNREC) installed and sampled 16 monitoring wells to determine the nature and extent of contamination. The results show that hazardous substances buried on site have been released to ground water. These substances include benzene, toluene, xylene, lead, trans-1,2-dichloroethylene, and polynuclear aromatic hydrocarbon compounds.

DNREC determined that these substances are in ground water at depths of up to 53 feet and a horizontal distance of at least 300 feet southeast of the site. The closest supply well, 1,000 feet southwest of the site, draws on the Cheswold aquifer. It is part of Dover's municipal water system. An estimated 45,000 people are served by public and private wells within 3 miles of the site. Of Dover's 14 municipal supply wells, 7 are within 1 mile of the site.

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

E.I. DU PONT DE NEMOURS & CO., INC. (NEWPORT PIGMENT PLANT LANDFILL)
Newport, Delaware

E.I. du Pont de Nemours & Co., Inc., formerly operated a 7-acre industrial landfill next to its pigment plant, now known as the Holly Run Plant, in Newport, New Castle County, Delaware. From 1902 to 1975, the landfill was used for the disposal of inorganically bonded metals, plant pigments, pigment sludges, magnetic tapes, and low-level radioactive residues, according to information Du Pont provided to EPA as required by section 103(c) of CERCIA.

When the landfill closed in 1975, Du Pont graded, covered, and seeded it and installed ll monitoring wells.

Subsequent sampling by the Delaware Department of Natural Resources and Environmental Control, EPA, and Di Pont indicated that the shallow Columbia Aquifer, and to a lesser degree, the deeper Potonac Aquifer, have been contaminated, both on and off the site, with heavy metals, including barium, cadmium, and zinc, as well as trichloroethylene and tetrachloroethylene.

The Artesian Water Co., which serves 131,000 people throughout New Castle County, has six wells within 3 miles of the site. Private wells are also used for drinking water supplies in some areas, the nearest well being 0.5 miles from the site.

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

PIGEON POINT LANDFILL New Castle, Delaware

Pigeon Point Landfill covered 187 acres in New Castle, New Castle County, Delaware, along the Delaware River just north of the Delaware Memorial Bridge. It started receiving industrial and municipal wastes in 1968. Before it was a landfill, the U.S. Army Corps of Engineers used the site for disposal of dredge soils from the Delaware and Christiana Rivers. New Castle County operated the site from 1968 through 1981. In 1981, the Delaware Solid Waste Authority (DSWA) took control of site operations. Thereafter, it was permitted by the State to accept municipal wastes. Operations stopped and the site was closed in November 1985. During closure, the site was covered with a 2-foot clay cap and seeded.

Refore 1980, according to the Delaware Department of Natural Resources and Environmental Control, wastes disposed at the unlined landfill included paint sludges, metal sludges, petroleum refinery wastes, polyvinyl chloride wastes, chemical process wastes, and phenol resins.

In 1984-85, a consultant to DSWA detected arsenic, benzene, ethylbenzene, and tetrachloroethylene in on-site monitoring wells. Aquifers of both the Columbia and Potomac Formations are at risk. The Artesian Water Co. has nine wells within 3 miles of the site. The water is blended with water from other wells. The public water supply for 150,000 people is potentially affected.

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

DIAMOND SHAMROCK CORP. LANDFILL Cedartown, Georgia

The Diamond Shamrock Corp. Landfill covers less than 1 acre in Cedartown, Polk County, Georgia. Between 1972 and 1977, the company buried drummed and bulk waste in three 6-foot-deep trenches. The waste included fungicides, amides, oil and oil sludges, esters, ethers, alcohols, and metallic salts, according to the company.

The trenches are unlined, in an area of permeable soils, and in the floodplain of Cedar Creek, which is a major tributary of the Coosa River. Ground water is shallow (less than 10 feet). These conditions potentially threaten surface water and ground water in the area.

An estimated 25,000 people draw drinking water from public wells within 3 miles of the site.

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

MATHIS BROTHERS LANDFILL (SOUTH MARBLE TOP ROAD)
Kensington, Georgia

The Mathis Brothers Landfill is located 1.5 miles north-northwest of Kensington, along the east side of South Marble Top Road in the north central part of Walker County, Georgia. The site is on a hill on a 20-acre parcel of land, of which only 5 acres were used for waste disposal. The privately-owned landfill operated from 1974 to 1980. It had a permit from the Georgia Environmental Protection Division to accept nonhazardous wastes. Sometime after 1980, the landfill was abandoned.

Residues from herbicide manufacturing and latex waste from the carpet-manufacturing industry were buried in unlined trenches. According to records obtained from Velsicol Chemical Corp.'s plant in Chattanooga, Tennessee, the wastes contained arsenic and organic chemicals, including benzonitrile and herbicides. About 3,000 tons of hazardous waste were buried during the operational period.

The site is located in the outcrop of the Knox Group in the Valley and Ridge Geologic Province. The soil is permeable, thus facilitating movement of contaminants into ground water, which is at 40 feet. The Kensington Water and Sewer Authority provides drinking water to an estimated 4,300 people from wells 1.5 miles south of the site. A private well is 1,900 feet from the site.

Surface water within 3 miles downstream of the wastes is used for fishing and irrigation.

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

PARSONS CASKET HARDWARE CO. Belvidere, Illinois

The Parsons Casket Hardware Co. Site covers approximately 2-acres in a residential area of the City of Belvidere, Boone County, Illinois. Parsons used an electroplating process for manufacturing metal fittings for caskets from 1898 until August 1982, when it filed for bankruptcy under Chapter 7 of the Federal bankruptcy code.

Wastes generated by Parsons included electroplating sludge, cyanide plating solutions, cyanide cleaning solutions, and bronze, nickel, and brass sludges. In 1982, the Illinois Environmental Protection Agency (IEPA) conducted an initial waste inventory of the site. Approximately 120 drums of various sizes were stored inside and outside of the manufacturing building. Many were dented, corroded, leaking, or had no lids; 34 had originated from Parsons' parent company, Dickey Grabler Co. of Cleveland, Ohio. About 4,800 gallons of wastes were stored in above— and below—ground tanks. An unlined lagoon contained approximately 166,500 gallons of liquid wastes and 1,230 cubic yards of sludges. The wastes contained high levels of lead, copper, cyanide, and nickel, as did monitoring wells around the lagoon, according to analyses conducted by EPA.

Municipal wells within 3 miles of the site are the sole source of drinking water for Belvidere's 15,200 residents, and all are potentially at risk of contamination. The nearest well is 1,500 feet from the site. The Kishwaukee River, which is used for fishing and recreation, is approximately 1,400 feet from the site.

Before Parsons filed for bankruptcy in August 1982, the State ordered it to repackage all leaking drums and move them indoors. In October 1984, the State began cleaning up the lagoon, completing the operation in the spring of 1985. On December 7, 1984, Filter Systems, Inc., of Addison, Illinois, purchased the on-site building and agreed to recycle or remove the drums stored in the building. Filter Systems has removed the drums.

In July 1985, soil taken from the lagoon cleanup area still contained high levels of cyanide, nickel, and copper, according to EPA. No plans have yet been formalized to deal with that problem.

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

Because the owner or operator is in bankruptcy and may not be financially able to take appropriate remedial action, the site meets the first component of EPA's policy for listing RCRA-related sites.

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

STAUFFER CHEMICAL CO. (CHICAGO HEIGHTS PLANT)
Chicago Heights, Illinois

Stauffer Chemical Co. produces food-grade products and pesticides in a plant covering 15 acres in Chicago Heights, Cook County, Illinois. Stauffer purchased the plant in 1958 from Victor Chemical Works, which had made phosphates there since 1902.

Stauffer Chemical disposed of about 175,000 cubic feet of hazardous waste in an unlined pile and in buried drums, according to information the company provided EPA as required under CERCLA section 103(c). The waste area covers 2.5 acres. At one time, Stauffer also had two settling lagoons. After they were closed, the sediment from the lagoons was added to the pile. When on-site disposal ceased in 1979, the 60-foot-high pile was covered with 1 to 2 feet of clay.

According to tests conducted in 1984 by EPA, high levels of arsenic and lesser amounts of antimony and selenium are present in shallow ground water below the site. To date, the deeper aquifer is not contaminated. However, the two aquifers are hydraulically connected so that water can move between them. Wells extending into the lower aquifer within 3 miles of the site provide drinking water for an estimated 70,000 people. The nearest well is within 1 mile of the site.

The site is near a drainage ditch that leads to Thorn Creek 3,000 feet away. Sauk Trail Lake, which is used for recreation, is within 3 miles downstream of the site.

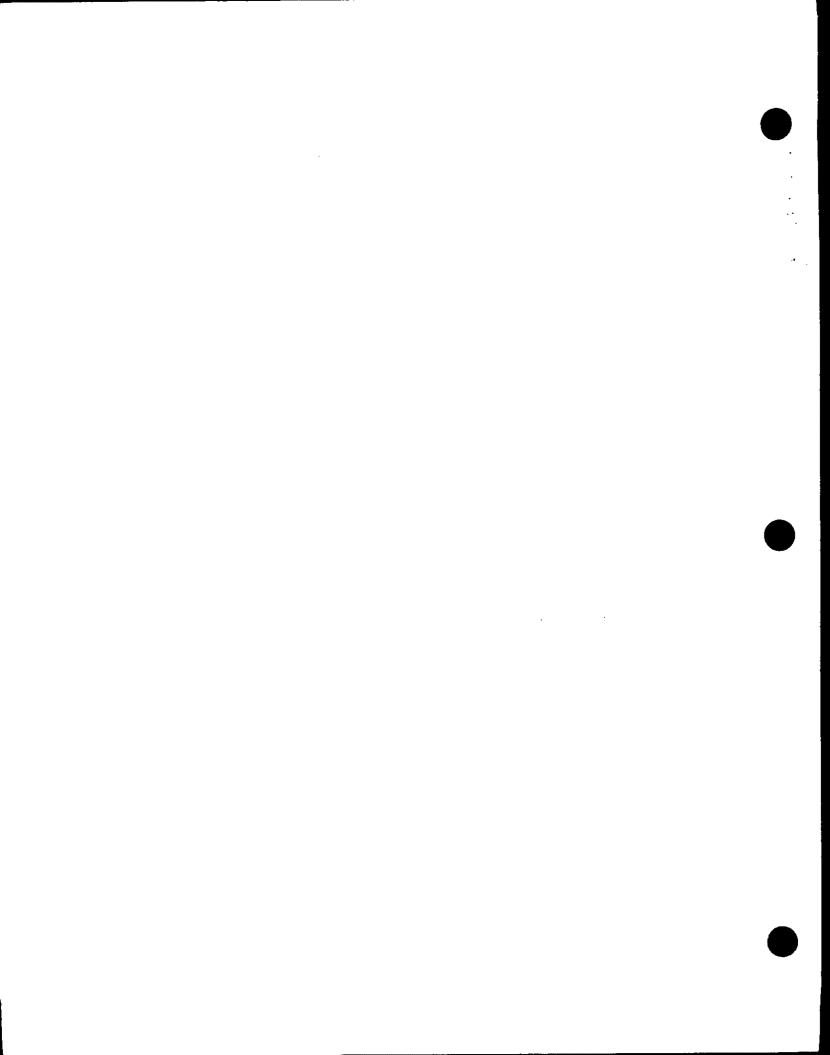
Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

McCARTY'S BALD KNOB LANDFILL Mt. Vernon, Indiana

McCarty's Bald Knob Landfill covers 28 acres near Mt. Vernon, Posey County, Indiana. From 1971 to 1978, the privately-owned operation accepted municipal wastes from the city of Mt. Vernon under a State permit. In addition, according to information provided to EPA under CERCLA section 103(c), the landfill received 3,000 tons of hazardous wastes from the Mt. Vernon plant of General Electric Co. (GE). The wastes contained bisphenol-A and solvents.

In 1982, GE covered the landfill with 1 foot of clay topped by clean soil, graded and seeded it to control erosion, and installed 35 monitoring wells.

Three aquifers below the landfill are contaminated with phenol, according to tests conducted in June and October 1981 by GE. An estimated 1,000 people obtain drinking water from private wells tapping the two top aquifers within 3 miles of the site. The nearest well is 700 feet from the site.



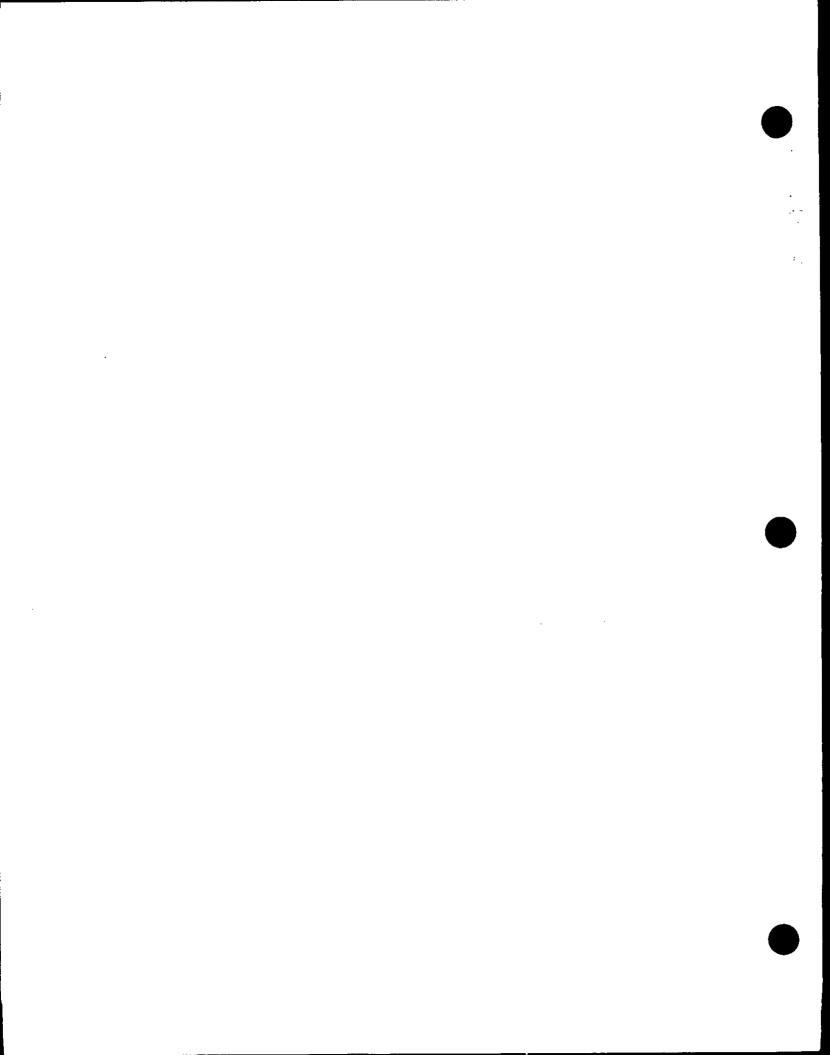
Hazardous waste site listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)("Superfund")

OBEE ROAD Hutchinson, Kansas

The Obee Road Site consists of a plume of contaminated ground water in the vicinity of Obee Road in the eastern section of Hutchinson, Reno County, Kansas. The Kansas Department of Health and Environment has been investigating the area since July 1983. In August 1984, the State detected volatile organic chemicals, including benzene, trans-1,2-dichloroethylene, ethylene, and toluene, in wells drawing on a shallow alluvial aquifer. An estimated 1,900 residents of suburban Obeeville obtained drinking water from private wells in the aquifer. They have now been connected to Hutchinson's municipal system.

Preliminary work by the State has tentatively identified a source of the contamination as the former Hutchinson City landfill, which is located at the eastern edge of what is now the Hutchinson Municipal Airport. Before closing in about 1973, the landfill accepted unknown quantities of liquid wastes and sludges from local industries, as well as solvents from small metal-finishing operations at local aircraft plants. Also, the Department of Defense (DOD) may have disposed of solvents at the landfill. DOD owned or maintained the airport until 1963.

Another possible source of contamination is individual septic tank systems. Commercial septic tank cleaners commonly contain trichloroethylene, dichloromethane, and benzene.



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

DUTCHTOWN TREATMENT PLANT Ascension Parish, Louisiana

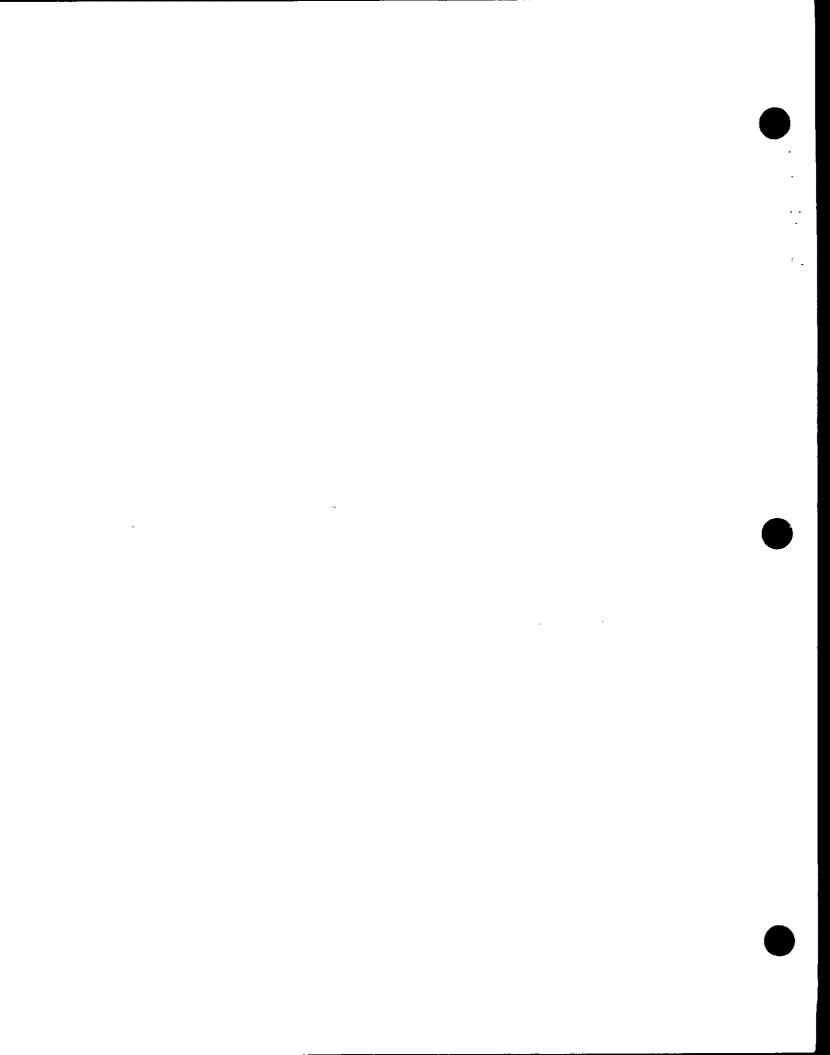
The Dutchtown Treatment Plant Site covers 21.5 acres near Dutchtown in Ascension Parish, Louisiana. The owner reclaimed oil on the site from 1965 to January 1984. In 1979, the State contacted the owner, now deceased, concerning compliance of the site with the State's hazardous waste requirements. He submitted a site closure plan in June 1982, but the plan was not acceptable to the State. In January 1983, the State ordered the owner to stop unauthorized removal of hazardous waste and in January 1984 declared the site abandoned.

A large holding pond on the site contains 300,000 gallons of oily wastes and 1,700 cubic yards of sludge waste; 372 cubic yards of contaminated soil are also on the site. The wastes contain benzene, ethylbenzene, carbon tetrachloride, toluene, and 1,1-dichloroethane, according to the Louisiana Department of Environmental Quality. In 1984, the State took two emergency actions to prevent overtopping of the holding pond.

Analyses conducted by the State in 1984 revealed that shallow ground water (30 feet) under the site is contaminated with chloroform, benzene, carbon tetrachloride, and 1,1-dichloroethane. About 1,500 people obtain drinking water from wells within 3 miles of this site. The wells are drilled to depths of 200-280 feet.

The site is 1 mile from coastal wetlands and 0.25 miles from freshwater wetlands in the Mississippi River watershed.

In June 1986, EPA detected benzene, ethylbenzene, tetrachloroethene, toluene, and vinyl chloride in the air near the holding pond, posing the threat of fire and explosion. About 130 people live within 0.25 miles of the site. Although the site is fenced, it is unguarded. Thus, people and animals can come into direct contact with hazardous substances.



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

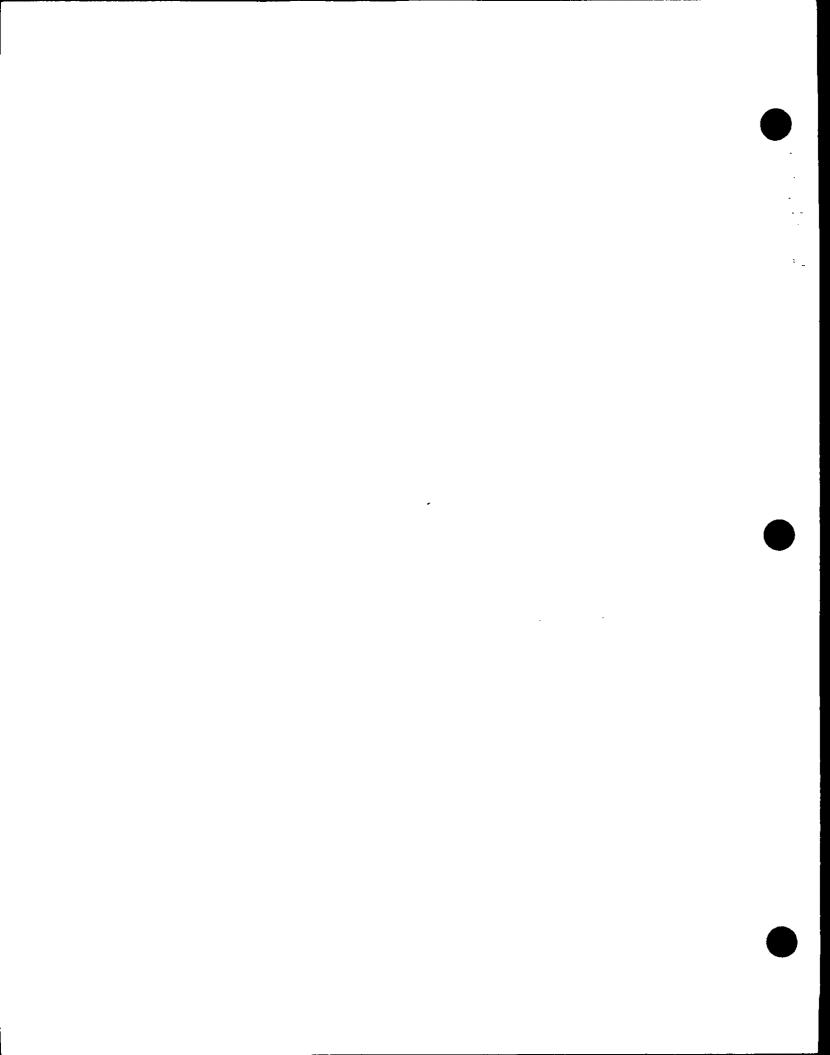
WOODLAWN COUNTY LANDFILL Woodlawn, Maryland

Woodlawn County Landfill covers approximately 37 acres in Woodlawn, Cecil County, Maryland. The county operated the site as a landfill from 1965 to January 1979, when it was closed under State order. Prior to becoming a landfill, the property was a privately—owned sand and gravel quarry.

Cecil County filled two large quarrying pits with agricultural, municipal, and industrial wastes. The landfill was open 24 hours a day until 1973, and there are few records of what was disposed during that time. According to the State, the only documented waste disposed of at the site was 783 tons of polyvinyl chloride (PVC) sludge by the Firestone Tire & Rubber Co. In the spring of 1981, Firestone capped the PVC waste area. The monitoring wells contain vinyl chloride, benzene, tetrahydrofuran, toluene, and lead, according to tests conducted by the State and EPA.

An estimated 5,700 persons draw drinking water from public and private wells within 3 miles of the site. The nearest, a private well, is within 400 feet of the landfill.

In May 1984, EPA detected toluene, tetrachloroethene, and lead in stream sediments approximately 200 feet from the site. The stream, designated by the State as a trout stream, enters Basin Run about 2 miles from the site.



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

BARRELS, INC. Lansing, Michigan

The Barrels, Inc., Site covers 1.8 acres at 1404 North Larch Street in the city limits of Lansing, Ingham County, Michigan. The company recycled drums on the property, which it leased from the Chesapeake and Ohio Railway Co. from 1964 to 1981.

Barrels, Inc., allegedly dumped waste residues from drums directly onto the ground as an initial step in recycling drums. According to tests conducted by the Michigan Department of Natural Resources (MDNR) in 1983, shallow ground water is contaminated with lead and zinc. The shallow contaminated aquifer is hydraulically connected to the deeper Saginaw Formation, so that water can move between them. The shallow and deeper aquifers provide drinking water to the 133,000 residents of Lansing and Holt via municipal wells within 3 miles of the site. The nearest well is 800 feet away.

The nearest downslope surface water, Grand River, is 1,800 feet from the site. The Grand River, which is a fishing stream, is potentially threatened by conditions at the site. The areas along the river are a habitat for the Indiana bat, designated by the U.S. Fish and Wildlife Service as an endangered species.

In January 1986, MDNR gained access to the site from a State Court. MDNR has approved \$449,589 under the Michigan Environmental Response Act for removal and disposal of barrels, debris, contaminated soil, and buried tanks. All drums, 1,001 yards of visibly contaminated soil, and nine underground tanks have been removed and sent to an approved hazardous waste disposal facility. The contents of one underground tank and two tanks in the building have been pumped out.

Activities remaining include: removal of additional soil, crushed drums, resins, nonhazardous and hazardous liquids, nonhazardous solids, and additional buried tanks. Soil sampling is underway to determine the extent of soil contamination.

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

FORD MOTOR CO. (SLUDGE LAGOON)
Ypsilanti, Michigan

Ford Motor Co. operated an aircraft bomber plant for the Federal Government during World War II in Ypsilanti Township, Washtenaw County, Michigan. Sludge from the plating operation was piped to a 3-acre unlined lagoon on plant property. The present owners are Ford Motor and the Wayne County Road Commission, which operates the Willow Run Airport. The abandoned lagoon is on airport property.

Ford Motor disposed of approximately 1 million cubic feet of sludge in the lagoon, according to information the commission provided to EPA as required by CERCIA section 103(c). Analysis of the sludge conducted in 1979 by the Michigan Department of Natural Resources detected PCBs and heavy metals, including lead, cadmium, and mercury.

A noncontinous sand and gravel aquifer underlies the area at a depth of 65 to 100 feet. An estimated 60,000 people draw drinking water from municipal wells within 3 miles of the site. Private wells are also in the area, the nearest about 2,000 feet from the site.

The nearest downslope surface water, Willow Creek, is 800 feet from the site. It is potentially threatened because the lagoon is unlined and had no structures to divert run-off. Belleville Lake, 3,600 feet from the site, is used for recreation.

The site is unfenced, making it possible for people and animals to come in direct contact with hazardous substances.

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

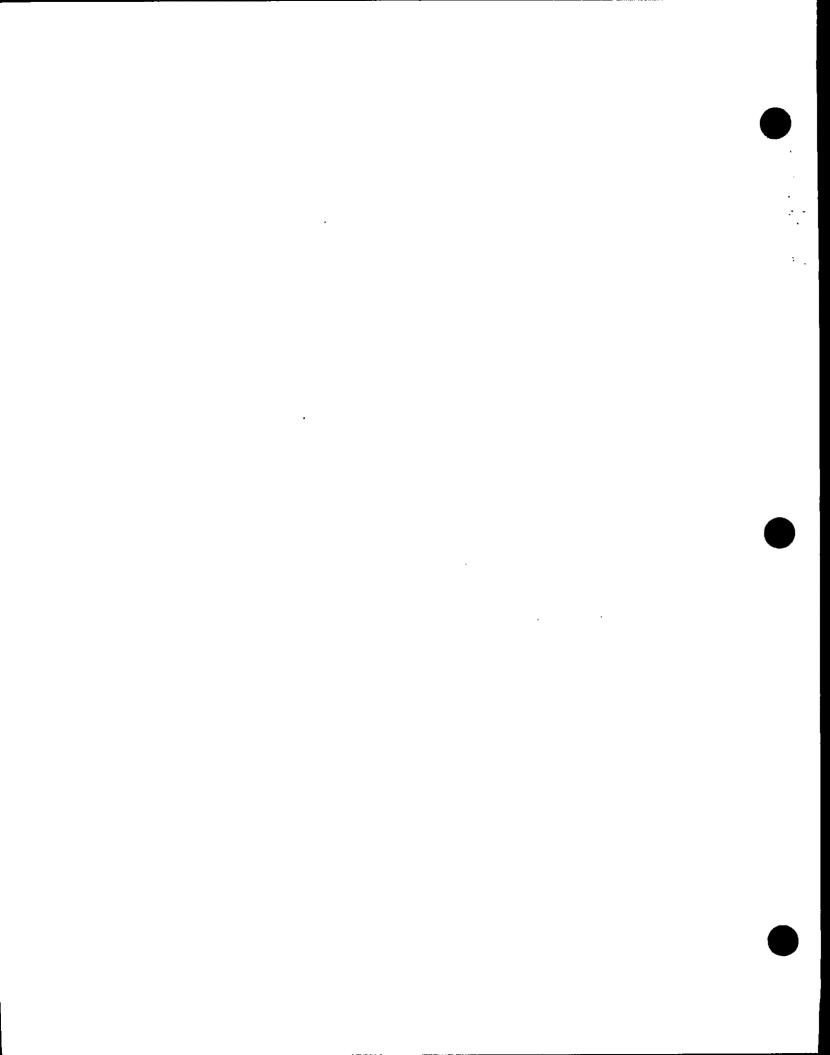
METAL WORKING SHOP Lake Ann, Michigan

The Metal Working Shop Site covers approximately 1 acre in Lake Ann, Benzie County, Michigan. From 1974 to 1977, the owner of the property finished metals in the shop using iron phosphate. Two types of rinse waters were generated in an oxidizing phase of the operation: an acidic rinse (dilute hydrochloric acid) containing iron phosphate and a caustic rinse (sodium hydroxide). From approximately October 1975 to February 1977, effluents from these rinses were mixed to neutralize them and then dumped onto the ground. According to the owner, 400 gallons per day were disposed of for 8 to 10 days a month.

Analyses by the State detected chromium, molybdenum, and other heavy metal salts in the rinses. Ground water occurs at shallow depths (10 feet), and wells draw from the very permeable sand and gravel drift aquifer. Hence, the wells are threatened by any heavy metals in site soil. An estimated 1,100 people obtain drinking water from private wells into the aquifer within 3 miles of the site. One well is on the site.

The site is on a hill between Lake View and Lake Ann. Many other lakes are within 3 miles of the site.

In June 1983, a new owner took over the site and operates it under the name Lake Ann Manufacturing.



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

TWIN CITIES AIR FORCE RESERVE BASE (SMALL ARMS RANGE LANDFILL) Minneapolis, Minnesota

Twin Cities Air Force Reserve Base, in Minneapolis, Hennenin County, Minnesota, is located within and adjacent to the Minneapolis-St. Paul International Airport complex. Since the beginning of military operations in 1944, activities at the base in support of mission operations have resulted in the development of a number of areas used for storage and disposal of hazardous substances. Major industrial operations include various maintenance shops (aircraft, serospace ground equipment, and vehicles) and corrosion control shops. These industrial activities generate varying quantities of contaminated fuels, spent solvents, cleaners, and paint wastes containing trivalent chromium, lead, zinc, and 1,2-trans-dichloroethylene.

This NPL site is the Small Arms Range Landfill, the main base landfill from approximately 1963 to 1972. The site is along the Minnesota River and covers 2 to 3 acres. In addition to general base refuse, quantities of paint sludge (orimarily paint thinners, paint removers, and miscellaneous paints, primers, lacquers, and enamels), paint filters (containing chromium), and leaded-fuel sludge were also disposed of at the landfill.

A monitoring well on the landfill contains 1,2-trans-dichloroethylene significantly above background concentrations, according to tests conducted by an Air Force contractor. The site is periodically flooded, which has resulted in release of trivalent chromium, lead, and zinc to the Minnesota River. The northern boundary of the Minnesota Valley National Wildlife Refuge lies 500 feet from the landfill. An estimated 64,700 people living in the Minneapolis-St.Paul metropolitan area depend on public and private wells within 3 miles of the site for drinking water.

Twin Cities Air Force Reserve 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 (decords search) in March 1983. Phase II (hydrogeological investigation) is underway.

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

RITARI POST & POLE Sebeka, Minnesota

The Ritari Post & Pole Site lies 3 miles northwest of Sebeka, Wadena County, Minnesota. The 15-acre site has been an active wood-preserving operation since 1959, using pentachlorophenol (PCP) as the preservative.

From 1959 to 1973, Ritari Post & Pole used a process that allowed liquid PCP to drip from treated wood directly onto the ground. The owner estimates that 26,880 gallons of PCP dripped onto the ground during that time. In addition, the operator applied an estimated 3,180 gallons of PCP-laden sludge directly to the ground.

Analyses in 1982 by the Minnesota Pollution Control Agency and a consultant to Ritari show that a monitoring well on the site and a private well less than 500 feet away are contaminated with PCP. The private well has been replaced by a new well into a deeper uncontaminated aquifer. Ritari has taken no cleanup actions. Approximately 350 people draw drinking water from the contaminated aquifer within 3 miles of the site; 400 acres of cropland are irrigated with the water.

The site is 0.75 miles upslope of a wetland area draining into Cat River. The river is used for recreation. About 160 acres of cropland are irrigated with river water drawn from 2 miles downstream of the site.

The site is only partially fenced, making it possible for people and animals to come into direct contact with hazardous substances.

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

WHEELING DISPOSAL SERVICE CO., INC., LANDFILL Amazonia, Missouri

Wheeling Disposal Service Co., Inc., operates a landfill on two contiguous areas covering approximately 200 acres. The site is approximately 1 mile southeast of Amazonia in Andrew County, Missouri.

The landfill was established in the early 1970s. Between June 1980 and September 1981, the company voluntarily ceased operations pending the issuance of State and Federal regulations on hazardous waste disposal facilities. In September 1981, the facility resumed operations under the authority of a special waste disposal permit issued by the State of Missouri. The Missouri Department of Natural Resources (MDNR) has periodically inspected and monitored ground water at the site since 1975.

Based on monthly MDNR hazardous waste logs, wastes containing pesticides (including heptachlor, toxaphene, and lindane), cyanide, arsenic, sulfide, nickel, cadmium, lead, zinc, asbestos, paint sludge, and tanning sludge were disposed of at this landfill.

In field investigations conducted by EPA in December 1980, November 1982, and November 1983, trichloroethylene, chloroform, and 1,2,—dichloroethane were detected in monitoring wells and springs on-site at concentrations significantly above background levels.

Drinking water is supplied to 314 residents of Amazonia through wells within 1 to 2 miles of the site and 90 to 100 feet deep in the Missouri River alluvial aquifer. Shallow ground water beneath the site provides partial recharge to the aquifer.

Mace Creek, 4,000 feet downslope from the landfill, is threatened by drainage from the site. Local surface waters are used for fishing.

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

KEM-PEST LABORATORIES Cape Girardeau, Missouri

The Kem-Pest Laboratories Site occupies 6.1 acres on Missouri State Highway 177, near Cape Girardeau, Cape Girardeau County, Missouri. The company formulated various pesticides on the site from 1965 to 1975, when it went out of business.

According to information provided to EPA as required by CERCIA section 103(c), the plant generated wastes, including the following pesticides: aldrin, dieldrin, 2,4-dichlorophenoxyacetic acid (2,4-D), endrin, heptachlor, methyl parathion, and thiuram. On the site was a 1,250 square-foot lagoon used to treat plant waste and sewage. When the company closed the lagoon in April 1981, it was filled in with compacted clay and covered with another layer of compacted clay.

An EPA inspection in May 1983 revealed that the lagoon cover was eroding, and no vegetation was observed on the cover. Heptachlor and endrin were detected in surface soil near the lagoons and in drainage paths leading off-site. In April 1984, EPA detected heptachlor, chlordane, endrin, aldrin, and 4,4-DDD in on-site monitoring wells into the shallow aquifer. This aquifer, which is not currently used, is connected to a deeper aquifer that supplies private drinking water wells within 3 miles of the site. The wells serve an estimated 1,300 people.

The site is in the floodplain of the Mississippi River. A freshwater wetland is within 1 mile. Cape Girardeau (population 34,000) draws drinking water from the Mississippi less than 1 mile downstream of the site.

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

ABERDEEN PESTICIDE DUMPS Aberdeen, North Carolina

The Aberdeen Pesticide Dumps Site is located in Aberdeen, a rural area in Moore County, North Carolina. The site consists of five dumps within 2 miles of each other. All but one are privately owned.

The Fairway Six dump covers approximately 1.5 acres and was discovered in August 1984 during construction of a new golf course. In October 1984, the North Carolina Solid and Hazardous Waste Management Branch (SHWMB) found several bags labeled toxaphene and noted a strong chemical odor. The soil contained DDT, DDD, toxaphene, and lindane (BHC), according to SHWMB analyses.

The Twin dumps cover about 1 acre; one is privately owned and one is owned by Aberdeen and used for recreation. They are within 350 feet of each other. The dumps were reported to SHWMB in August 1984 by State highway personnel who had smelled chemical odors in the area. SHWMB detected various pesticides in Twin dumps soil. Several operations have manufactured pesticides in a building 500 feet from the dumps: Taylor Chemical Co. (1936-64); E-Z Flo, owned by Union Carbide Corp. (1964-72); and Farm Chemicals, Inc. (1972 to the present).

The McIver pesticide dump covers approximately 1 acre. It was discovered in November 1984 when SHWMB, acting on information provided by a citizen, found 200-300 55-gallon pesticide drums in Lucks Landfill, a rubble landfill occupying a leased portion of the McIver property. The State determined that the drums contained small amounts of parathion and had been shipped by Farm Chemicals, Inc. Soil at the landfill contains many of the same pesticides found at the other dumps. Further investigation found another area where pesticide bags and residues had been dumped.

In February 1985, the State, Farm Chemicals, Inc., and Lucks Construction Cosigned an Administrative Order on Consent requiring the companies to remove the drums from the McIver dump. In March 1985, 687 drums were removed, steam cleaned, triple rinsed, crushed, and sent to the Moore County landfill. Rinsate was applied to farm land as per label directions for the pesticide.

In June 1985, using CERCLA emergency funds, EPA removed pesticide-contaminated soil and wastes from the Fairway Six, Twin, and McIver dumps.

The Route 211 dump covers approximately 0.75 acres. The owner reported it in July 1985 after EPA emergency actions. SHVMMB investigated, finding a pile containing cardboard containers, pesticide bags (one marked Taylor Chemica), and various powders and tarry residues. SHVMMB detected various pesticides in soil.

The 0.5-acre Farm Chemicals, Inc., dump is approximately 500 feet from the Twin dumps. The company has manufactured pesticides since 1972. Previously, E-Z Flo (1964-72) and Taylor Chemical (1936-64) manufactured pesticides there. After discovery of the four other pesticide dumps, EPA investigated Farm Chemicals in May 1986. Various pesticides and PCB-1242 were found.

Soils at all five areas are permeable, facilitating movement of contaminants into ground water. Nearby Page's Lake is also potentially threatened. About 5,100 people draw drinking water from public and private wells within 3 miles of the site. U.S. Environmental Protection Agency/Remedial Response Program

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

CAROLINA TRANSFORMER CO. Fayetteville, North Carolina

Carolina Transformer Co. occupies approximately 1.5 acres where North Eastern Boulevard meets Middle Road in Fayetteville, Cumberland County, North Carolina. The company has recycled electrical transformers at the site since before 1958.

After a highly publicized case in North Carolina concerning roadside dumping of PCB oil in July 1978, residents living near Carolina Transformer became concerned about possible ground water contamination from spills at the site. Samples taken by EPA in 1978 and 1979 revealed contamination of soil on the site by PCBs and PCB carrier compounds (chlorobenzenes), contamination by PCB carrier compounds of a shallow residential drinking water well about 250 feet west of the site, and trace contamination of Carolina Transformer's deep industrial well. The house with the contaminated well was connected to the Fayetteville water system in late 1979. The State attempted to have Carolina Transformer correct the contaminated soil problem but without success.

In March 1982, sampling by the State determined that run-off from the site violated surface-water-quality standards for PCBs. In 1984, EPA made efforts to have Carolina Transformer clean up the site. When the efforts failed, EPA issued a CERCLA section 106 Administrative Order requiring the company to remove and properly dispose of the contaminated soil. After the company refused, EPA, using CERCLA emergency funds, began to clean up at the site in August 1984. During the removal action, EPA excavated 975 tons of contaminated soil and transported it to a hazardous waste landfill permitted under the Resource Conservation and Recovery Act.

The surficial sand and cretaceous clay aquifers beneath the site are the source of water for private wells within 3 miles of the site that serve over 3,000 persons.

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

CHARLES MACON LAGOON AND DRUM STORAGE Cordova, North Carolina

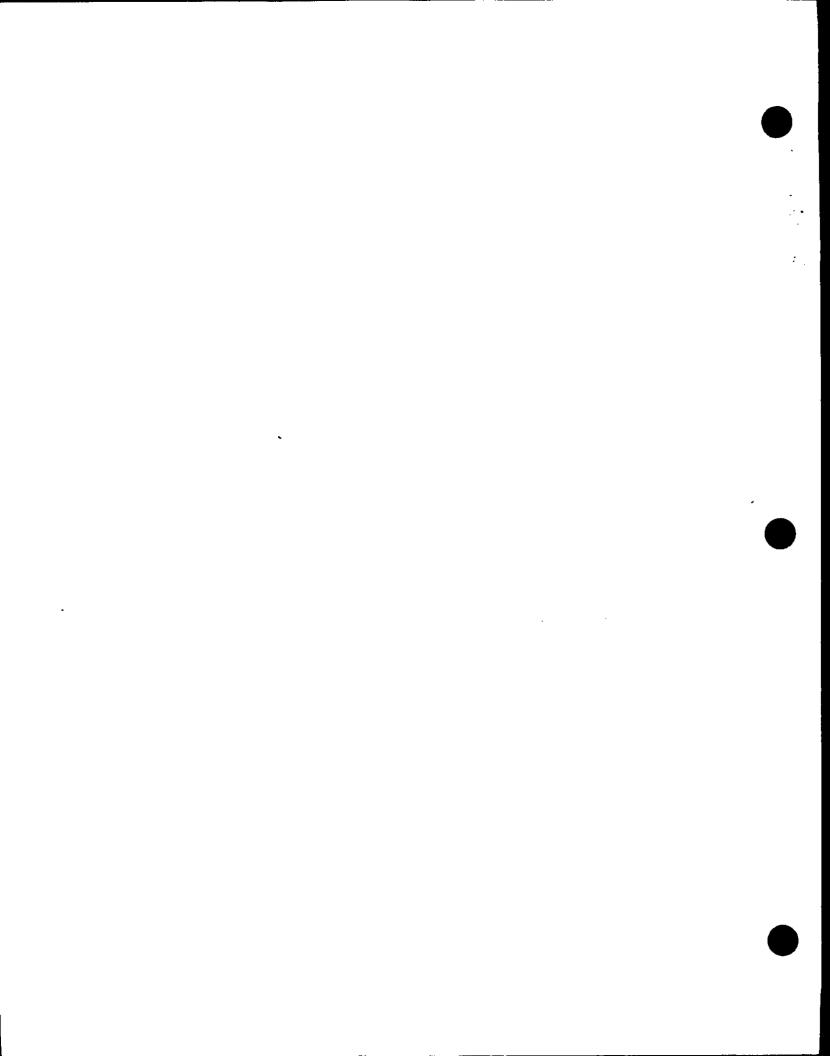
The Charles Macon Lagoon and Drum Storage Site covers 16 acres on State Road 1103 in Richmond County, approximately 1.5 miles southwest of Cordova, North Carolina. The owner operated a waste oil reclamation facility which also accepted other wastes, including spent solvents, acids, and bases. Operations at the facility ceased in October 1981 when the owner died.

During a site inspection in 1980, the North Carolina Solid and Hazardous Waste Management Branch (SHWMB) found 11 lagoons containing waste oil and sludge and 2,173 55-gallon drums containing various chemical wastes. Eight of the lagoons were unlined and overflowing. The State's analyses of the oil and sludge wastes in the lagoons found lead, chromium, and barium at concentrations considered hazardous under the Resource Conservation and Recovery Act (RCRA). The drums contained hazardous substances, which included methanol, toluene, vinyl thinners, epoxy, enamels, lacquers, ethyl acetate, methylene chloride, and sodium hydroxide.

In November 1982, the owner's estate started to clean up the site in compliance with a State court order obtained by SHWMB in August 1982. After removal of 300 55-gallon drums and installation of two on-site monitoring wells, the estate's resources were expended. In November 1983, using CERCLA emergency funds, EPA began to remove all remaining drums and excavated and filled in all but one of the lagoons. The unexcavated lagoon contains solidified creosote waste, solidified sludge, 43 crushed empty drums, and contaminated soil from the cleanup operation. This lagoon was then filled in and capped with 3 feet of clay.

During February and March 1985, EPA detected barium, chromium, trichloroethylene, 1,1-dichloroethane, and 1,1,2,2-tetrachloroethane in monitoring wells downgradient of the site. An estimated 1,100 people draw drinking water from private wells within 3 miles of the site. The nearest well is 440 feet from the site.

The property slopes gently southwest toward the Pee Dee River, located approximately 1 mile west of the site. Between the site and the Pee Dee Piver are two ponds, two streams, and a swamp. In 1985, EPA detected toluene, identified in the wastes during cleanup activities, in the sediments of the pond closest to the site. Sediment samples from the other locations did not contain toluene above the minimum detection limits.



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

COSDEN CHEMICAL COATINGS CORP. Beverly, New Jersey

Cosden Chemical Coatings Corp. manufactures paints on an 8.8-acre site in Beverly, Burlington County, New Jersey. The site is 300 feet from a residential area and 4,000 feet from the Delaware River.

In numerous site inspections, the New Jersey Department of Environmental Protection (NJDEP) has found large amounts of soil contaminated from excessive spillage and leaking drums. About 700 drums containing paint waste and solvents, including toluene and ethylbenzene, have also been found on-site. Recent analyses conducted by the State found PCBs contaminating much of this waste. In February 1985, NJDEP secured the site by consolidating the contents of the drums into roll-off dumpsters.

An estimated 69,000 people depend on ground water within 3 miles of the site for their drinking water. Three municipal wells are within 1 mile of the site. Soils on the site are highly permeable, which facilitates the movement of contaminants into ground water.

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

CURCIO SCRAP METAL, INC. Saddle Brook Township, New Jersey

Curcio Scrap Metal, Inc., is a small scrap metal yard in Saddle Brook Township, Pergen County, New Jersey. The site is in a small industrial area surrounded by a medium-density residential area.

On at least one occasion, the company received a shipment of electrical transformers, salvaging the copper and baling the remaining metal. During the cutting of the transformers, oil containing PCBs spilled onto the ground, according to an inspection conducted by the New Jersey Department of Environmental Protection (NJDEP) in September 1983. An area covering about 200 square feet was blackened with oil. Soil from the area contains PCBs, primarily Aroclor 1260, according to NJDEP. Run-off from the site, taken from a drainage ditch at the rear of the property, also contains PCBs.

Soil on the site is relatively permeable, which facilitates movement of contaminants into ground water. The site is above the Brunswick formation, one of the State's most important and extensive aquifers. The fractures in the aquifer, which is at a depth of about 20 feet, facilitate movement of ground water from the site. About 93,000 people depend on public and private wells within 3 miles of the site as their sole source of drinking water. A private well is about 300 feet southwest of the site.

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

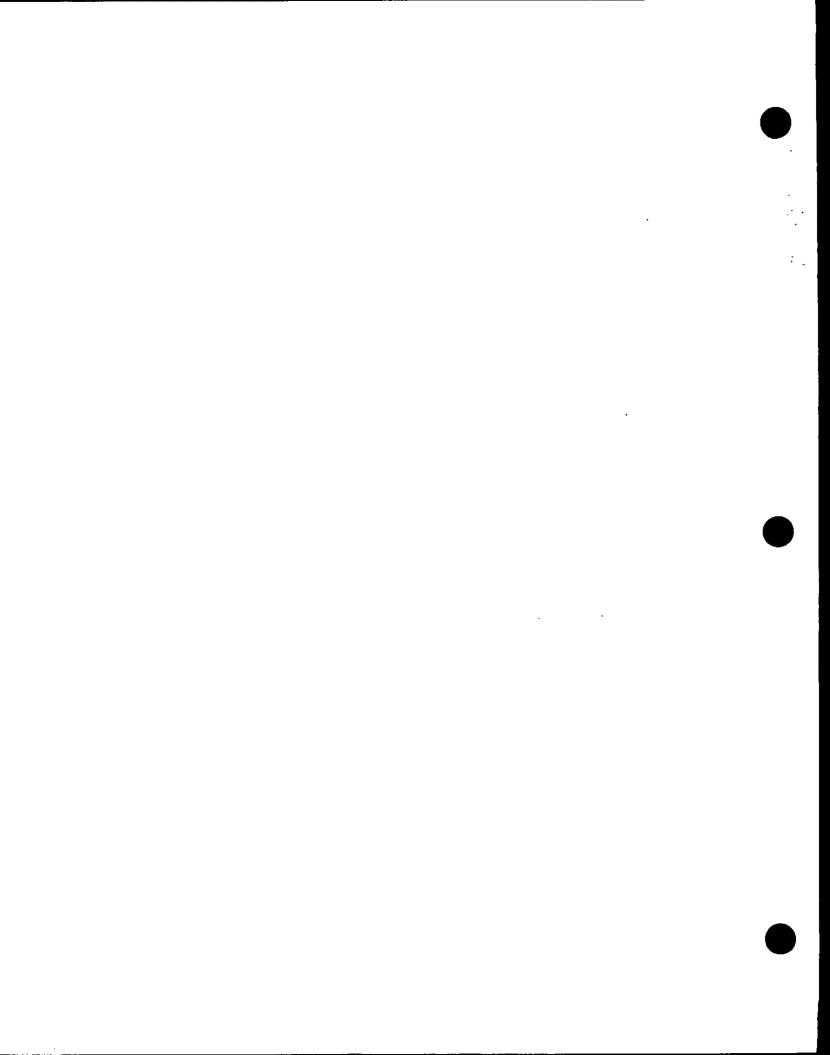
HORSTMANN'S DUMP East Hanover, New Jersey

Horstmann's Dump covers about 15 acres on Great Meadow Lane-in East Hanover, Morris County, New Jersey. From 1965 to 1973, the owner/operator accepted raw sewage and septic wastes from various industries. The site is in a marshy area, and the wastes were dumped as fill. Wastes were deposited below the water table. The site was unlined and had no leachate controls.

In 1970 Horstmann registered as a public utility. Subsequently, citizens objected about Horstmann's operations to the New Jersey Department of Environmental Protection (NJDEP) and the New Jersey Board of Public Utilities (NJBPU). In 1973, Horstmann petitioned NJBPU to stop operations, which NJBPU agreed to. As a result of this action, NJDEP in 1974 ordered the site to close so that closure requirements could be enforced.

In 1984, EPA tests found lead, nickel, mercury, volatile organic chemicals, and PCBs in on-site soil. The soil is highly permeable, which facilitates movement of contaminants into ground water. About 75,000 people draw drinking water from public and private wells within 3 miles of the site. A well of the South East County Utilities Authority is less than 2,000 feet away.

Surface water is threatened because the site is in a swampy area and is surrounded by wetlands. The site is within the Passaic Valley floodplain and is bordered by two Passaic River tributaries — Black Brook and Pinch Brook.



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

ISLIP MUNICIPCAL SANITARY LANDFILL Islip, New York

The Islip Municipal Sanitary Landfill covers approximately 65 acres on Blydenburgh Road in the Town of Islip, Suffolk County, New York. The site is also known as the Blydenburgh Road Landfill. The town has operated the landfill since 1957. It has a permit from the State to accept municipal wastes.

In early 1978, the State filed an Administrative Complaint against Hickey Carting Co. A hearing was conducted which concluded that in June 1978 Hickey Carting had disposed approximately 50 or more 55-gallon drums containing a mixture of perchloroethylene and other liquids at the site. The drums were buried in the highest (southeastern) part of the site. In May 1979, the New York Commissioner of Environmental Conservation adopted the findings of the hearing and fined Hickey Carting \$4,000.

According to tests conducted by the County Health Department in 1980, private wells adjacent to the landfill are contaminated with tetrachloroethylene, trichloroethane, trichloroethylene, and vinyl chloride. An estimated 75,000 people draw drinking water from Suffolk County Water Authority wells, in addition to numerous private wells; all are within 3 miles of the landfill.

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

JONES SANITATION Hyde Park, New York

The Jones Sanitation Site covers about 10 acres in a rural area of Hyde Park, Dutchess County, New York. One owner operated the site from approximately 1956 to 1977, when a new owner/operator took over. The site now disposes only of septic waste collected by commercial firms. In addition, from the early 1960s through 1979, industrial liquid wastes and sludges generated by Alfa-Laval (formerly DeLaval Separator Co. of Poughkeepsie), a manufacturer of mechanical separating equipment, were accepted. These materials consisted primarily of oils and greases but also included acids, alkalies, solvents, metals from plating operations, pigments, phenol, methylene chloride, chloroform, trichloroethylene, and naphthalene. About 77,500 gallons per month of liquid industrial waste from Alfa-Laval were disposed of at the site between 1972 and 1979, according to a report prepared by an Alfa-Laval consultant.

In the early disposal operations, wastes were dumped into long unlined pits in a 2-acre area. The pits were dug to various depths; some were below the water table, which is 5 to 7 feet below the surface. Wastes were allowed to seep into the ground through subsurface sands and gravels. When a pit was completely filled with liquids, it was filled with gravel and abandoned. According to the Dutchess County Health Department, disposal operations were poorly controlled, and as many as 30 pits may have been in use at one time. Recently, the present owner excavated the pits and piled the contents on the ground without a liner. The site is unfenced and within sight of a public road.

The septic wastes presently being accepted are first chlorinated and the solids then stabilized in a pond. The liquid passes through two consecutive sand filters. The effluent is again chlorinated and discharged into tile fields on the site. Sludge remaining in the pond is composted on an asphalt pad on the site.

In June 1978, the owner/operator submitted an application for a permit under the State Pollutant Discharge Elimination System (SPDES). The State denied the permit. A current SPDES permit application is for subsurface discharge of septic waste. All applications and permits for sludge removed from the pond have been submitted to the State.

On-site wells contain trichloroethylene, acetone, and other contaminants, according to tests conducted in 1985 by a consultant to the owner. At least 23 wells serving 9,500 people are within 3 miles of the site. The nearest well is within 1,000 feet.

Surface water is threatened because Maritje Kill and associated wetlands cross the property about 375 feet dowgradient of the disposal area. Surface water within 3 miles downstream of the site is used for recreation.

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

TENTH STREET DUMP/JUNKYARD Oklahoma City, Oklahoma

The Tenth Street Dump/Junkyard covers approximately 3.5 acres on Tenth Street, Oklahoma City, Oklahoma County, Oklahoma. From about 1959 to 1979, a private individual used the site as a salvage yard, accepting materials such as paint thinners, used tires, and old transformers. During this time, a fire destroyed 1,000 tires, perhaps explaining a black tar-like appearance in an area of no vegetation. Another individual now operates an automobile junkyard at the site. Before the junkyard operations, the city operated the site as a landfill.

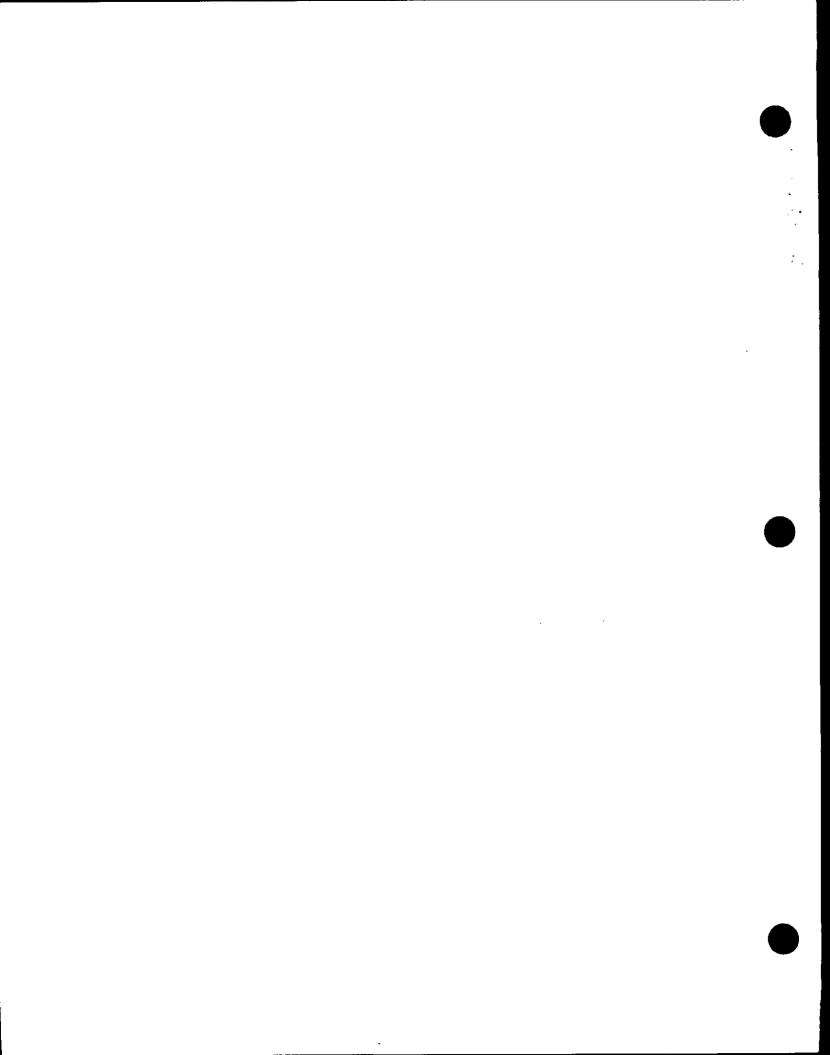
During a site inspection in 1983, EPA observed about 15 drums containing an oily substance. Some were open, bulging, or rusting.

Composite soil samples EPA took at the site contain high levels of PCBs and lead — as high as 71,446 milligrams per kilogram (mg/kg) of PCBs and 5,000 mg/kg of lead. The site is only partially fenced, making it possible for people and animals to come into direct contact with hazardous substances.

Soil at the site is relatively permeable. This, along with past waste management practices, threatens ground water, which is at about 25 feet below the surface. An estimated 30,000 people get drinking water from public and private wells within 3 miles of the site. The nearest well is within 0.25 miles of the site.

Surface water is threatened because run-off from the site enters the adjacent North Canadian River.

On August 29, 1985, EPA issued a unilateral Administrative Order under CERCLA section 106(a) against the present owner of the property and the son of the former operator (deceased) of the salvage yard. The order directs them to decontaminate and remove junk automobiles; remove and properly dispose of PCB-electrical equipment and drums containing hazardous substances; and install a locked fence, synthetic liner, and clay cap. The owners did not respond. In late 1985 and early 1986, EPA used CERCLA emergency funds to decontaminate junk automobiles and move them to a nearby location, store two drums of benzene and four drums of equipment on the site pending disposal at an approved facility, and fence, cap, and seed the site.



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

ALLIED PLATING, INC. Portland, Oregon

Allied Plating, Inc., started operating a chrome-plating facility in Portland, Multnoman County, Oregon, in 1957. The operation generated electroplating wastes that contain heavy metals (including chromium, barium, cadmium, lead, and mercury) and arsenic, according to tests conducted by EPA, the State, and the company.

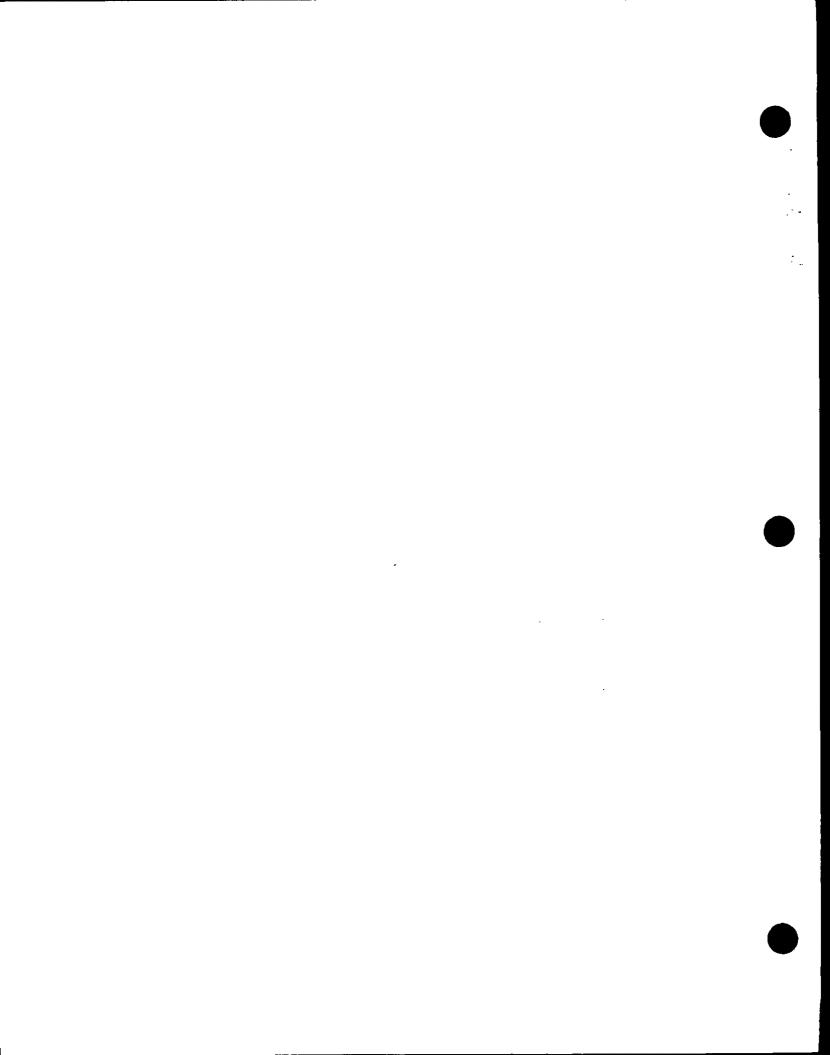
For over 25 years, the company discharged the wastes without pretreatment into an unlined pond in an on-site 0.5-acre swamp that had been filled in. In mid-1985, during an EPA inspection, the banks of the pond were eroding, and the natural drainage channels were filled in with refuse. Shortly thereafter, the owner pumped the contents of the pond into the Portland sewer system.

In 1978, the company detected chromium and barium in an on-site well and in industrial and municipal wells within 2 miles of the site. EPA and the State confirmed the results in 1981, 1984, and 1985. About 1,500 people draw drinking water from public and private wells within 3 miles of the site. A well used for food processing is 1,700 feet from the site. Ground water is also used for irrigation within 3 miles of the site.

The site drains into Columbia Slough, which is 600 feet to the north northeast. The slough is a part of the Columbia River.

The company received Interim Status under the Resource Conservation and Recovery Act (RCRA) when it filed Part A of a permit application for a surface impoundment. In 1982, the company filed for bankruptcy under Chapter 11 of the Federal bankruptcy code, and in 1984 consented to liquidation under Chapter 7 bankruptcy.

Because the owner or operator is in bankruptcy and may not be financially able to take appropriate remedial action, the site meets the first component of EPA's policy listing RCRA-related sites. In addition, the company lost Interim Status (and hence authority to operate) when it did not certify by November 8, 1985, that it was complying with certain RCRA Subtitle C regulations.



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

ALADDIN PLATING Scott Township, Pennsylvania

The Aladdin Plating Site covers 2 acres in Scott Township, Lackawanna County, Pennsylvania. The company ran a small electroplating operation from 1947 to 1982, when it closed following a fire. The electroplating of nickel, copper, and chromium was the primary process during the company's operations. This process used sulfuric acid, chromic acid, cyanide, and water (which was used mainly for rinsing purposes). During the electroplating process, the rinse water became contaminated with electroplating materials. The contaminated rinse water was deposited in two unlined lagoons on the site. Over the years of operation, electroplating sludge was deposited into the lagoons, which had no diking or diversion ditches, permitting them to overflow. About 10 years ago, the owner removed sludge from the lagoons and filled them with dirt.

Several vats and containers thought to contain cyanide solution, chromic acid, and sulfuric acid remain as they were at the time of the fire. Some are leaking, according to an inspection conducted by the Pennsylvania Department of Environmental Resources (PA DER).

Analyses conducted by PA DER in 1983 detected chromium in soil at several locations near the building and lagoon. EPA tests in 1984 also identified lead and cyanide in on-site soils. Presence of these contaminants on-site potentially threatens local water supplies. An estimated 11,000 people draw drinking water from wells within 3 miles of the site. The nearest well is within 1,500 feet.

The Pennsylvania Gas & Water Co. has two intakes along Leggetts Creek — the Griffin Creek intake and Providence Reservoir intake — which are approximately 0.5 miles and 2.1 miles, respectively, downstream of the site. Water from the Griffin Creek intake is pumped to the Providence Reservoir/Treatment Plant where it is treated and mixed into the distribution system. This water is used to supplement the water supply for Scranton (population 88,000). Water from the Griffin Creek intake is also sold to Keystone Water Co. and National Utilities Co. as a supplemental supply. The two companies serve approximately 13,000 people.

PA DER cited the company for violating the Clean Streams Law in 1974. PA DER also cited the company for operating without a permit to treat industrial waste.

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

AMERICAN ELECTRONICS LABORATORIES, INC. Montgomeryville, Pennsylvania

American Electronics Laboratories, Inc. (AEL) manufactures electronic communication equipment and components on a 20-acre parcel of land in Montgomeryville, Montgomery County, Pennsylvania. AEL uses trichloroethylene (TCE) in its operations.

The Pennsylvania Department of Environmental Resources (PA DER) and AEL have detected TCE, 1,1,1-trichloroethane, tetrachloroethylene, and related breakdown products in on-site and off-site wells. Soils on the site also contain TCE (up to 50,000 ppb).

An estimated 106,000 people use public and private wells within 3 miles of the facility as their source of drinking water. A public well is within 50 feet of the site.

AEL has removed 125 cubic yards of contaminated soil and transported it to an EPA-approved hazardous waste facility. Since 1981, AEL has been treating contaminated ground water by pumping on-site monitoring wells and treating the water at a nearby sewage treatment plant.

The site is 950 feet north of an unnamed tributary to Neshaminy Creek, which is used for recreation.

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

AMETEK, INC. (HUNTER SPRING DIVISION)
Hatfield, Pennsylvania

Ametek, Inc.'s Hunter Spring Division manufactures precision springs, reels, and measuring and controlling apparatus on an 8-acre site in Hatfield, Montgomery County, Pennsylvania. The facility uses trichloroethylene (TCE) as a degreasing solvent.

In February 1986, the North Penn Water Authority (NFWA) detected TCE and 1,1-dichloroethylene in on-site and downgradient wells. Background wells contained neither of these contaminants.

An estimated 69,700 people obtain drinking water from public and private wells within 3 miles of the facility.

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

AVCO LYCOMING (WILLIAMSPORT DIVISION)
Williamsport, Pennsylvania

The Avco Lycoming (Williamsport Division) Site consists of approximately 28 acres in the west-central portion of Williamsport, Lycoming County, Pennsylvania. For over 50 years, this facility has been primarily involved in the production of aircraft engines. The plant operates a still for the reclamation of Varsol, a petroleum solvent, and (since the early 1950s) a waste treatment facility. Past poor housekeeping practices apparently have contaminated the site, according to the Pennsylvania Department of Environmental Resources (PA DER).

On-site monitoring wells, off-site downgradient wells, and a well field of the Williamsport Municipal Water Authority (WMWA) 3,000 feet southwest of the site are contaminated with trichloroethylene and chromium, according to tests conducted in 1985 by a consultant to the company. The well field was used as a backup supply under drought conditions until it was closed in November 1984 because of contamination with volatile organic chemicals. WMWA serves about 65,000 people within 3 miles of the site.

In November 1985, Avco and PA DER signed a Consent Order and Agreement involving monitoring of ground water and cleanup of on-site soils and ground water. Currently, ground water is being pumped, treated to remove contaminants, and returned to the ground. Cleanup of the municipal well field was not addressed in the order.

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

COMMODORE SEMICONDUCTOR GROUP
Lower Providence Township, Pennsylvania

The Commodore Semiconductor Group Site covers about 10 acres in the Valley Forge Corporate Center in Lower Providence Township, Montgomery County, Pennsylvania. Commodore manufactures computers, calculators, and various electronic components on property rented from Valley Forge Corporate Center.

Waste solvents, including trichloroethylene (TCE), were stored in an underground concrete storage tank on-site until 1974, when it was taken out of service. A steel tank was then installed. Inspections conducted by the Pennsylvania Department of Environmental Resources (PA DER) indicate both tanks have leaked.

According to tests conducted by EPA, PA DER, and Commodore, soils and ground water both on and off the site have been contaminated with TCE, 1,1-dichloroethylene, trans-1,2-dichloroethylene, and 1,1,2,2-tetrachloroethane. Two public water supply wells of the Audubon Water Co., which serves 6,300 people, were taken out of service in 1979 due to contamination. Approximately 800,000 people draw drinking water from wells into the contaminated aquifer within 3 miles of the site.

In 1979, Commodore started investigations and cleanup actions at the site. The company has excavated soils and pumped water from a contaminated well, then sprayed it onto fields. The volatile solvents dissipate into the air. Since February 1984, an air stripper, which is more efficient at removing the solvents, has been in use.

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

GENTLE CLEANERS, INC./GRANITE KNITTING MILLS, INC. Souderton, Pennsylvania

The Gentle Cleaners, Inc./Granite Knitting Mills, Inc., Site is in Souderton, Montgomery County, Pennsylvania. Gentle Cleaners, Inc., has been in business since 1953. It used perchloroethylene (PCE or tetrachloroethylene) during 1953-83; it changed to a combination of PCE and 1,1,1-trichloroethane (1,1,1-TCEA) in 1983. Next door to Gentle Cleaners is Granite Knitting Mills, Inc., a hosiery mill that has operated for over 50 years. This facility used PCE as part of its dry cleaning operations for many years.

The North Penn Water Authority (NPWA) discovered PCE in a municipal well in the area in 1979. Tests conducted by EPA in August 1986 identified Gentle Cleaners, Inc., and Granite Knitting Mills, Inc., as the sources of of 1,1,1-TCEA in a private well 200 feet south of the site.

An estimated 74,700 people obtain drinking water from public and private wells within 3 miles of the site. There is no other source of drinking water.

The site is 300 feet northwest of Skippack Creek, which is used for recreation.

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

HELLERTOWN MANUFACTURING CO. Hellertown, Pennsylvania

Hellertown Manufacturing Co., a subsidiary of Champion Spark Plug Co., of Toledo, Chio, formerly manufactured spark plugs at 1770 Main Street in the borough of Hellertown, Northampton County, Pennsylvania. Operations commenced at the facility in 1930 and continued until it closed in October 1982.

Between 1930 and 1976, Hellertown used five on-site lagoons for the disposal of its wastes. According to a preliminary assessment made by the Pennsylvania Department of Environmental Resources (PA DER), the wastes disposed of on-site included zinc plating waste, chrome dip waste, cleaners, and cutting oils. The lagoons were unlined, thereby permitting wastes to seep into the local soils and rock strata. The lagoons covered approximately 50,000 square feet and could hold an estimated 18,400 cubic yards. In 1970, the company reported that it discharged 300,000 drums of wastes to the lagoons. In 1976, all five lagoons were filled with excavated material from construction of the City of Bethlehem Waste Water Treatment Plant. From 1976 until 1982, Hellertown wastes were discharged into the local sanitary sewer system.

Ground water underlying the site is contaminated with 1,2-dichloroethylene, trichloroethylene, vinyl chloride, tetrachloroethylene, and 1,1,1-trichloroethane, according to tests conducted by PA DER in early 1985. This aguifer within 3 miles of the site supplies water to the Hellertown Water Co., the Bethlehem Steel Corp. plant, and private residences, affecting an estimated 15,000 people.

Surface water is potentially threatened by the site because the filled lagoons have no diversion structures. Saucon Creek and Lehigh River are used for fishing within 3 miles downstream of the site.

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

J.W. REX CO./ALLIED PAINT MANUFACTURING CO., INC./KEYSTONE HYDRAULICS Lansdale, Pennsylvania

The J.W. Rex Co./Allied Paint Manufacturing Co., Inc./Keystone Hydraulics Site covers 1 acre in Lansdale, Montgomery County, Pennsylvania. J.W. Rex Co., which was involved in heat-treatment of metals, owned the site before the mid-1970s. An underground storage tank was on the site. J.W. Rex used trichloroethylene (TCE) in another plant it operated nearby. Allied Paint Manufacturing Co., Inc., acquired the site in the mid-1970s. In 1979, while Allied owned the site, a fire destroyed a building on the site. Subsequently, Allied removed the underground tank. Soils surrounding the tank contained high levels of TCE, according to the North Penn Water Authority (NPWA).

Keystone Hydraulics has owned the site since 1979 and used it to store construction equipment.

High levels of TCE, vinyl chloride, cis-1,2-dichloroethylene, perchloroethylene (PCE or tetrachloroethylene), and 1,1-dichloroethylene were detected by NPWA in an on-site well. Contamination decreases with distance from the site.

In 1979, NFWA took a well within 200 feet of the site out of service due to contamination from TCE and PCE. An estimated 101,000 people obtain drinking water from public and private wells within 3 miles of the site.

An unnamed tributary to Towamencin Creek is about 5,000 feet from the site.

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

NOVAK SANITARY LANDFILL South Whitehall Township, Pennsylvania

The Novak Sanitary Landfill covers approximately 60 acres in South Whitehall Township, Lehigh County, Pennsylvania. The privately—owned landfill started operating in the late 1960s. Initially, demolition wastes were disposed in an abandoned quarry on the site. Later, the landfill began accepting municipal and industrial wastes.

In 1980, a new phase began when the first of five trenches was excavated. Disposal in these trenches was under a solid waste permit from the Pennsylvania Department of Environmental Resources (PA DER). PA DER closed the landfill in December 1984. General Electric Co. notified EPA, as required by CERCLA section 103(c), that its Allentown, Pennsylvania, plant had sent electroplating wastes containing heavy metals and organic wastes, including spent solvents, to the landfill. According to PA DER, other industrial clients of the landfill include Tyler Pipe Co., Tarkett Corp., Western Electric, and Caloric Corp.

Monitoring wells on the site are contaminated with a variety of organic and inorganic chemicals, including tetrachloroethene, toluene, 1,1-dichloroethane, and barium, according to EPA tests. A private well 1,200 feet southwest of the landfill boundary is similarly contaminated, according to EPA and PA DER. The landfill is in a limestone region that is very susceptible to ground water contamination and migration of contaminants. An estimated 17,300 people draw drinking water from public and private wells within 3 miles of the site. In January 1985, South Whitehall Township extended its water line to two residences near the landfill, because a well sampled by EPA contained organic and inorganic contaminants which could also be attributed to the landfill.

According to an EPA inspection in June 1984, a ditch encircling the site diverts run-off and leachate into an on-site pond. The diversion ditch and pond are not properly engineered, and the landfill is not adequately covered. Hence, surface water in the area is threatened. Jordan Creek within 3 miles downstream of the site is used for recreation.

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

PAOLI RAIL YARDS Paoli, Pennsylvania

The Paoli Rail Yards cover approximately 10 acres in Paoli, Chester County, Pennsylvania. The site consists of an electric train repair facility and a commuter rail station owned by Amtrak and operated by the Southeastern Pennsylvania Transportation Authority (SEPTA). Commuter trains are serviced, repaired, and stored at this facility. Routine maintenance and repair of railroad cars involve PCB-containing electrical equipment. The site is surrounded on three sides by residential communities and on the fourth side by commercial facilities. Until recently, the site was unsecured and easily accessible. Residents and commuters regularly used it as a shortcut to reach both the train station and the commercial properties.

In the late 1970s, both EPA and the Pennsylvania Department of Environmental Resources (PA DER) inspected the Paoli Rail Yards. This inspection, coupled with subsequent State investigations, led PA DER to issue an order in 1979 requiring Amtrak and SEPTA to determine the extent of contamination and correct any problem areas. Amtrak and SEPTA took some actions primarily involving collection of samples, some cleanup efforts, and further study of the site.

In November 1985, analyses of samples taken in July 1984 by a consultant to Amtrak and SEPTA were made available to EPA. The results indicate that a severe PCB problem exists at this site, with contamination ranging as high as 3 percent in on-site soils and to depths of up to 3 feet.

In December 1985, a team consisting of staff from EPA, the Federal Agency for Toxic Substances and Disease Registry, and the State Health Department made a preliminary assessment of the rail yards. The purpose of this assessment was to verify the existing sample results and identify those areas that were of most concern. The sampling effort was centered around the immediate threat posed by the presence of high levels of PCBs both on site and in the residential community.

On February 25, 1986, EPA filed a complaint in Federal court under the Toxic Substances Control Act, CERCIA, and the Resource Conservation and Recovery Act. The complaint seeks an order requiring the responsible parties to limit access to the site, control migration of PCBs, conduct sampling and analysis, and take measures to clean up the site and protect worker safety. A Consent Decree was also lodged on the same date. As a first step, SEPTA installed a security fence around the site.

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

RIVER ROAD LANDFILL (WASTE MANAGEMENT, INC.)
Hermitage, Pennsylvania

The River Road Landfill covers approximately 102 acres in Hermitage, Mercer County, Pennsylvania. It is owned by Eric Disposal Co., a subsidiary of Waste Management, Inc. The landfill has operated since 1962 as a sanitary landfill, accepting industrial, residential, and an unknown quantity of hazardous wastes. In 1984, it received a State permit to dispose of solid waste.

According to tests conducted in 1980 by a consultant to Waste Management, sludge disposed at the site contained PCBs.

In June 1985, EPA detected PCBs in sediments in a diversion ditch that discharges to the Shenango River. The ditch collected runoff from the landfill. The Shenango Valley Water Co. draws water for approximately 75,000 customers at a point 2 miles downstream of the landfill. EPA also detected chloroethane and 1,1-dichloroethane in wells on and off the site.

The site is not completely fenced, making it possible for people and animals to come into direct contact with hazardous substances in the diversion ditch.

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

SALFORD QUARRY Salford Township, Pennsylvania

The Salford Quarry covers approximately 3 acres on Quarry Road in Lower Salford Township, Montgomery County, Pennsylvania. The site was quarried for stone/aggregate for an unknown period prior to 1963. In 1963, American Olean Tile Co., which is owned by National Gypsum Co., purchased the abandoned quarry, and until 1980 used the site for disposal of its wastes. Included were waste tiles, unfused tile slurry, and other production wastes. In 1980, the State received complaints that tanks were buried on the site. In 1981, American Olean discovered two 10,000-gallon tanks. According to tests conducted by the company and the Pennsylvania Department of Environmental Resources (PA DER), the tanks hold tile slurry containing boron and fuel oil. After the company pumped out the oil, the site was officially closed in May 1982 in accordance with a plan approved by PA DER. Closure involved capping with soil, grading, and revegetating. Two monitoring wells were also installed as part of closure.

The downgradient monitoring well on-site is contaminated with trichloroethene, boron, arsenic, and cyanide, according to EPA analyses. An estimated 54,000 people draw drinking water from public (North Penn Water Authority) and private wells within 3 miles of the site. A private well 650 feet from the site is contaminated with boron, according to EPA analyses.

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

SPRA-FIN, INC. North Wales, Pennsylvania

Spra-Fin, Inc., has manufactured metal products on a 0.5-acre site in North Wales, Montgomery County, Pennsylvania, since 1963. This facility uses trichloroethylene (TCE) and stores it on-site in a 550-gallon above-ground tank. This tank replaced a deteriorated underground tank which was removed in 1982. The company also removed 80 cubic yards of TCE-contaminated soil near the buried tank in 1982.

On-site production wells sampled by the North Penn Water Authority show elevated levels of 1,1,1-trichloroethene, vinyl chloride, TCE, 1,1-dichloroethylene, and tetrachloroethylene. On-site soil samples contain the same contaminants.

An estimated 91,000 people obtain drinking water from public and private wells within 3 miles of the site. There is no other source of drinking water. Wissahicken Creek is 1,500 feet north of the site.

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

TRANSICOIL, INC. Worcester, Pennsylvania

Transicoil, Inc., manufactures electric motors on a 20-acresite in Worcester, Montgomery County, Pennsylvania. Records of the Pennsylvania Department of Environmental Resources (PA DER) show that the facility used several drums of trichloroethylene (TCE) per year as a degreasing solvent until 1976, when it changed to 1,1,1-trichloroethane. The company stores waste oil and solvents in an underground tank.

In September 1979, PA DER found high concentrations of TCE, 1,1,1-trichloroethane, 1,1-dichloroethane, 1,1-dichloroethylene, and cis-1,2-dichloroethylene in on-site wells. Subsequent sampling by a consultant to Transicoil confirmed the results.

An estimated 99,400 people obtain drinking water from public and private wells within 3 miles of the site.

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

WILLIAM DICK LAGOONS West Caln Township, Pennsylvania

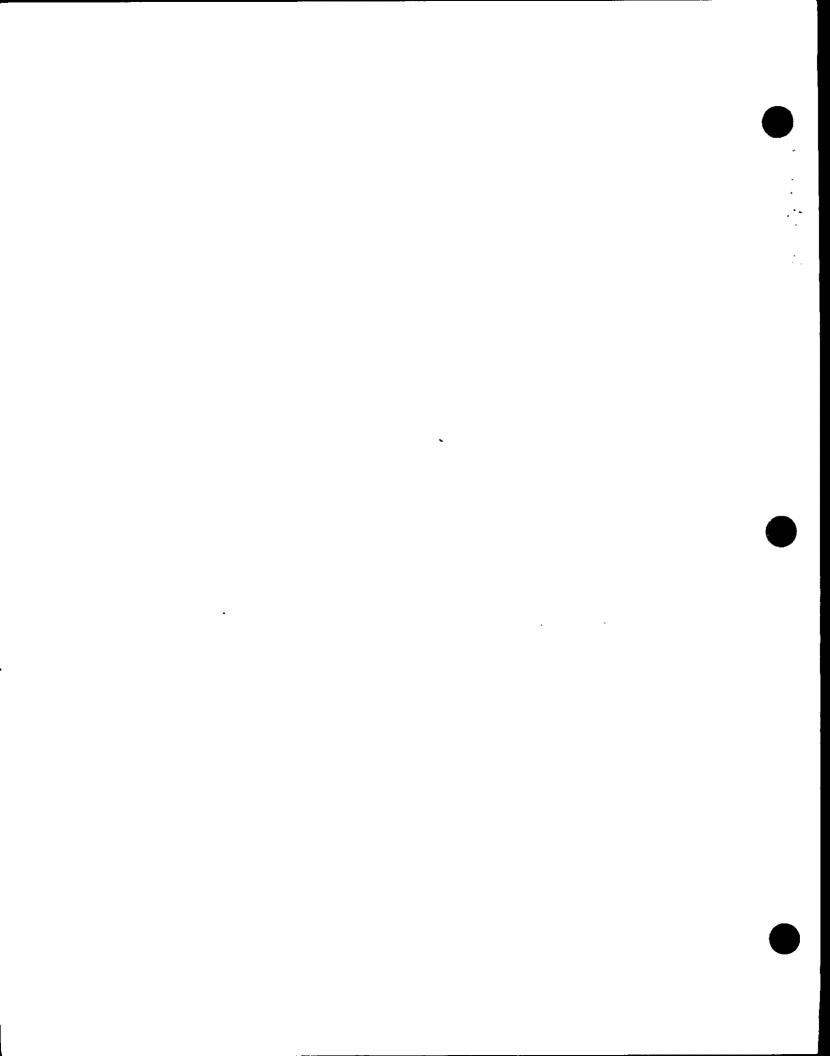
The William Dick Lagoons cover 10 acres in West Caln Township in the western part of Chester County, Pennsylvania. From the late 1950s to 1970, the three unlined lagoons were used by the Chemical Leaman Tank Lines, Inc., for disposal of final rinsewater from the interior cleaning of tank trailers. These trailers reportedly transported petroleum products, latexes, and resins.

According to tests conducted by EPA in April 1985, soils on the site contain 4,4-DDE, benzo(a)pyrene, trichloroethylene, and 2,4-dichlorophenol.

Soils on the site are moderately permeable, thus potentially threatening ground water. The Chickies Formation within 3 miles of the site is the sole source of water for private wells serving an estimated 1,400 people. The nearest well is 400 feet north of the site.

The lagoons were not adequately diked, permitting the contents to reach nearby surface waters. The 13,600 residents of Coatesville draw drinking water from an intake into Birch Run 2.8 miles downstream of the site.

The site is not completely fenced, making it possible for people and animals to come into direct contact with hazardous substances at the site.



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

GOLDEN STRIP SEPTIC TANK SERVICE, INC. Simpsonville, South Carolina

The Golden Strip Septic Tank Service, Inc. Site consists of five abandoned lagoons covering 2 acres on a farm in Greenville County, South Carolina, near Simpsonville. The lagoons were unlined and had inadequate structures to prevent run-off from leaving the lagoons. Between 1960 and 1975, the company deposited plating wastes and other liquids from nearby industries into the lagoons.

In 1978, two lagoons that had dried up were filled with dirt and graded. No sludge was removed. Two other lagoons still contain liquid waste and sludge. The fifth lagoon, which had received only a small volume of waste, was also filled with dirt.

Tests conducted by the South Carolina Department of Health and Environmental Control (SCDHEC) in 1981 and by EPA in 1984 indicated that chromium, copper, lead, and cadmium were in the water in the unlined lagoons, thus threatening ground water and surface water in the area. An estimated 1,600 people draw drinking water from springs and private wells within 3 miles of the site.

Rice Spring is approximately 500 feet from the lagoons. Stream sediments near the spring basin contain heavy metals (including chromium, copper, and nickel) and organic compounds, according to EPA tests conducted in 1985. The site is in the drainage basin of Gilder Creek, which is used for recreation within 3 miles of the site.

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

PALMETTO RECYCLING, INC. Columbia, South Carolina

The Palmetto Recycling, Inc., Site covers 2 acres in a rural area in Richland County about 8 miles north of Columbia, South Carolina. The site is between U.S. Routes 321 and 21 on the north side of Koon Store Road.

From 1979 to 1982, the company reclaimed lead on the site, primarily from lead acid batteries. In February 1981, the South Carolina Department of Health and Environmental Control (DHEC) denied the applications of Palmetto Recycling for permits to operate a hazardous waste facility and to transport hazardous wastes. The State alleged that Palmetto Recycling had not complied with the current operating permit, and that the facility had improperly treated, transported, and disposed of hazardous wastes. As a result of those denials, Palmetto Recycling requested an adjudicatory hearing on March 12, 1981. On June 25, 1981, a State order granted the facility a permit to operate for a period of 1 year subject to certain conditions. On February 11, 1983, Palmetto Recycling filed a voluntary petition for relief under Chapter 7 of the Federal bankruptcy code.

DHEC determined that wastes remaining at the site included an unlined pit containing 1,800 gallons of acid wastes, 100 drums of liquid caustic wastes, and an unstabilized 260-cubic-foot pile of battery casing scraps. The unlined pit was 5 feet deep, with soils that were moderately permeable. These conditions facilitate the movement of contaminants into ground water. An estimated 4,200 people draw drinking water from the Richtex Formation within 3 miles of the site. Wells range in depth from less than 50 feet to several hundred feet.

In 1983, DHEC detected lead, barium, cadmium, and chromium in on-site soil and in stream sediments both on and off the site.

The site is surrounded by numerous lakes, streams, and rivers. The nearest surface water body, the North Branch of Crane Creek, is about 100 yards east of the site and eventually flows into the Broad River. The creek is used for recreation.

In September 1983, the U.S. bankruptcy judge issued a court order requiring the Trustee of the property to clean up of the plant site under a plan to be approved by DHEC. Cleanup activities started in 1985 and were completed in March 1986. All activities were conducted under DHEC supervision. The case has not been discharged from bankruptcy court and is awaiting U.S. court proceedings.

The plant received Interim Status under the Resource Conservation and Recovery Act (RCRA) when the company filed Part A of a permit application. Because the owner or operator is in bankruptcy and may not be financially able to take appropriate remedial action, the site meets the first component of EPA's policy for listing RCRA-related sites.

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

SANGAMO-WESTON INC./TWELVE-MILE CREEK/LAKE HARTWELL PCB CONTAMINATION Pickens, South Carolina

The Sangamo-Weston, Inc./Twelve-Mile Creek/Lake Hartwell PCB Contamination Site consists of PCB-contaminated portions of the Twelve-Mile Creek Basin system and the Twelve-Mile Creek arm of Lake Hartwell. The site is in northwestern South Carolina, in Pickens, Pickens County. Sangamo has manufactured electrical capacitors on a 224-acre area in Pickens since 1955. PCBs were used in production of the capacitors between 1955 and 1976.

As required by CERCIA section 103(c), Sangamo notified EPA that it had disposed of approximately 38,700 cubic yards of PCB-contaminated waste on its plant site and an undetermined amount of waste in seven satellite dumps, all in the Twelve-Mile Creek Basin. Solid, sludge, and liquid wastes were stored or disposed of in piles, landfills, and impoundments. EPA is continuing to search for any additional sources of contamination that may exist.

EPA and the South Carolina Department of Health and Environmental Control (DHEC) detected PCBs in run-off leaving the Sangamo-Weston Pickens Plant and throughout the Twelve-Mile Creek Basin, including Lake Hartwell. Specific streams in which PCBs have been detected include: unnamed tributaries located downgradient from the Sangamo-Weston Pickens Plant and flowing into Town Creek, Twelve-Mile Creek, Golden Creek, Middle Fork Twelve-Mile Creek, and North Fork Twelve-Mile Creek. Lake Hartwell and Twelve-Mile Creek are used for recreation and drinking water.

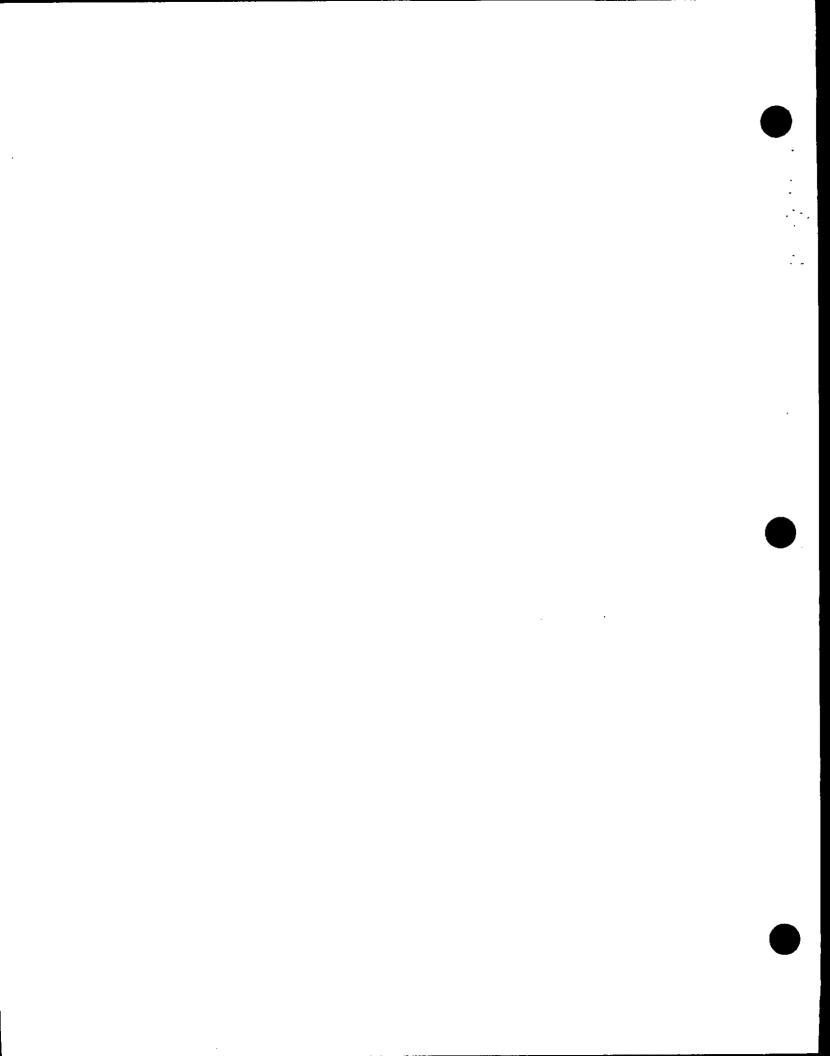
In December 1984, residents of Catteechee, South Carolina, initiated law-suits against Sangamo and two other companies over alleged health effects resulting from exposure to PCBs. Sangamo-Weston has removed over 17,000 cubic yards of PCB-contaminated waste from some past disposal areas located on and off the plant property. These wastes are contained in an EPA-approved landfill.

PCBs have been detected by DHEC and EPA in the drinking-water distribution system of the Easley-Central Water Plant, which serves 14,500 people. The plant intake is in Twelve-Mile Creek. Clemson University has an intake in the Twelve-Mile Creek arm of Lake Hartwell. It serves 15,800 students and employees.

PCB contamination in Lake Hartwell and its tributaries was first discovered in 1975. It was traced to effluent from the Sangamo-Weston Pickens Plant and from other sources in the watershed. Since 1977, EPA and DHEC have monitored PCB levels in fish taken from Lake Hartwell. Over the years, levels have been declining, although the rate of decline appears to be slowing.

From 1983 until early 1986, the Agency for Toxic Substances and Disease Registry reviewed data regarding possible exposures to PCBs in Pickens County. The agency said PCBs appear to present no imminent or substantial public health threat.

In August 1986, EPA negotiated a Consent Agreement with Sangamo-Weston for sampling to determine the extent of contamination at the Brazeale dump, one of the seven satellite dumps. The 0.5-acre dump was used for landfilling 24,000 cubic feet of PCB waste. The Brazeale property is on Wolf Creek Road about 1 mile southwest of Pickens. In November 1985, after finding PCB levels as high as 27,000 ppm in soil samples, EPA removed a mobile home from the property.



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

ARLINGTON BLENDING & PACKAGING CO. Arlington, Tennessee

Arlington Blending and Packaging Co. operated on a 2.5-acre site in the southwest section of Tennessee in Arlington, Shelby County, from the 1950s to 1979. The site is along the south side of State Route 1. A small residential area borders the site to the east.

While mixing and packaging pesticides for retail sales, the plant handled endrin, aldrin, dieldrin, chlordane, heptachlor, lindane, methyl parathion, and thimet. When the site was abandoned for economic reasons, deteriorating bags of pesticides and between 1,000 and 1,200 55-gallon drums, many leaking, remained in a building, according to the State.

In the mid-1970s, because of violations of the Clean Water Act, the State of Tennessee took enforcement actions against the company to reduce pesticide contamination from tributaries leading to the Loosahatchie River Canal, which is 7,100 feet from the site in the most probable drainage route. In response, the company hired a contractor to perform sampling and submitted a report that the Tennessee Department of Public Health approved in 1976.

In 1979, after the Tennessee Division of Water Quality Control sampled the site and an adjacent housing development, the State recommended that the developer install a fence between the homes and the plant and apply 1-2 inches of clean top soil in the backyards of the two homes closest to the plant. Between 1980 and 1983, the owner of Arlington Blending removed some pesticide wastes from the site.

In August 1983, EPA analyses identified high concentrations of various pesticides in soils on the site and the housing development. In October 1983, using CERCIA emergency funds, EPA removed 3,500 gallons of chemicals from drums, collected debris, and excavated 1,920 cubic yards of contaminated surface soils both on and off the site. All materials were transported to approved disposal facilities.

In 1985, the State detected pesticides in a shallow monitoring well on the site. About 2,700 people draw drinking water from two water systems within 3 miles of the site. The systems serve the cities of Arlington and Galloway. An Arlington well is within 1,200 feet of the site.

Underlying the site are three water-bearing zones that are used as drinking water sources and that have the potential for contamination from pesticide residues remaining at the site. The upper zone is contaminated with chlordane and other pesticides, according to the State. The three zones are normally separated by low-permeability clay layers. However, "windows" may be present in the clays, providing a potential route for contaminants to migrate to the lowest, most prolific water-bearing zone.

The site is in the floodplain of the Loosahatchie River Canal. The probable drainage route from the site leads to the canal, which is used for recreation.

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

MALLORY CAPACITOR CO. Waynesboro, Tennessee

Mallory Capacitor Co. formerly manufactured electrical capacitors on an 8.5-acre site in a small residential community in Waynesboro, Wayne County, Tennessee. The site is in the floodplain of the Green River.

This facility, a former shoe factory, was purchased by P.R. Mallory and Co. Inc., in 1968. In 1969, the company, now known as Mallory Capacitor Co., began to manufacture capacitors using PCBs as a dielectric fluid. In 1978, Mallory switched to dioctyl phthalate as a dielectric fluid. Dart Industries, Inc., acquired Mallory Capacitor Co. in early 1979 and sold it later in the year to Emhart Industries, Inc. As part of the sales agreement with Emhart, certain PCB wastes, a buried tank, and contaminated soil were removed from the site and sent to an approved PCB disposal facility.

PCBs entered the environment through spills, leaks, and intentional discharges, according to investigations conducted by EPA. On July 31, 1984, the plant voluntarily closed because of the discovery of PCB contamination throughout the site.

In 1985, tests conducted by EPA, Mallory, and its contractors detected PCBs in on-site sand and off-site wells downgradient of the site. An estimated 900 people obtain drinking water from wells and springs within 3 miles of the site. Sediments downstream from the site also contain PCBs, according to Mallory. Surface water within 3 miles downstream of the site is used for fishing and swimming.

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

WASATCH CHEMICAL CO. (LOT 6) Salt Lake City, Utah

The Wasatch Chemical Co. (Lot 6) Site covers 6 acres in Salt Lake City, Salt Lake County, Utah. Wasatch began formulating various organic chemical products, including pesticides, on 15 acres in the early 1960s. Subsequently, the site was subdivided into parcels of 6 and 9 acres, which are now owned by two separate entities. Lot 6 has not been used since before 1980.

The Utah Department of Health estimates that approximately 2,300 cubic yards of wastes have been disposed in a concrete pond and in drums on Lot 6. During an inspection in June 1985, the State found 48 drums holding ignitable and reactive liquids and 13 pressurized gas cylinders in poor condition; several of the drums were leaking. Residential and commercial industrial areas are within a few hundred yards of the drum storage area. Approximately 85,000 people live within 3 miles of the site.

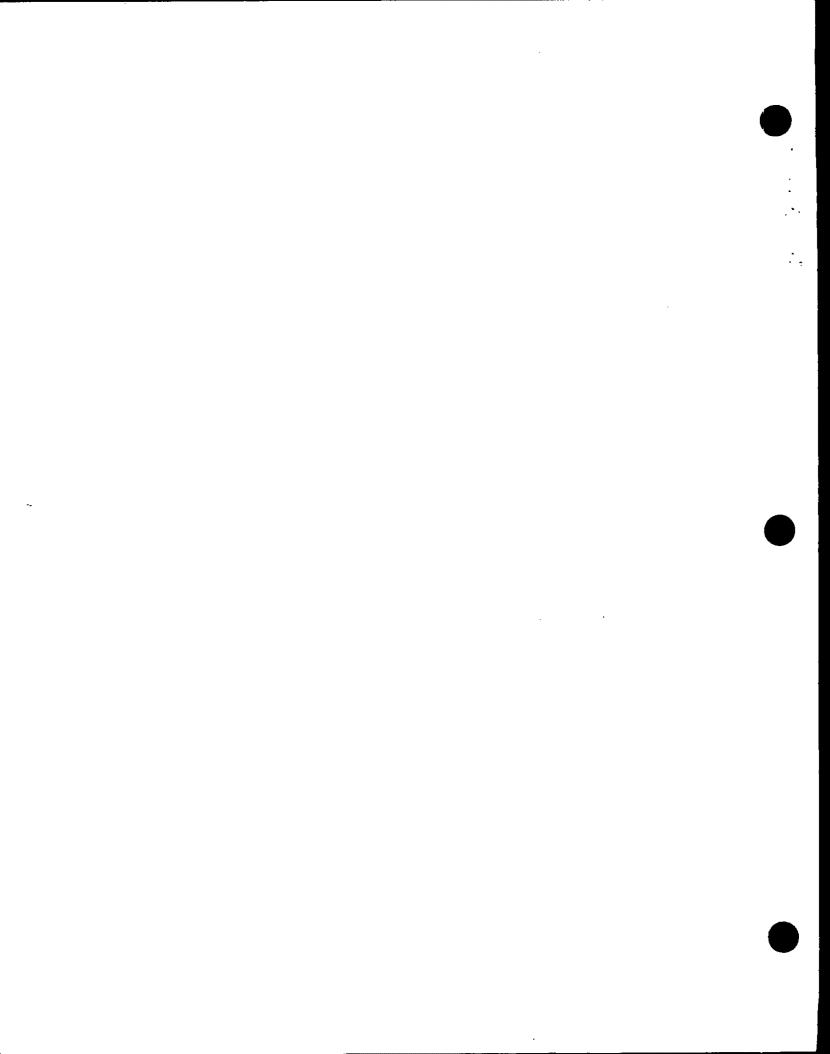
Additional wastes from the operation were discharged into the 700 West Stream, a ditch that drains into the Jordan River.

Tests conducted by the State in June 1985 detected several chemicals, including pesticides and methyl isobutyl ketone, in ground water. 700 West Stream also has elevated levels of some of these compounds.

About 60,000 people obtain drinking water from private wells within 3 miles of the site. The nearest well is within 2,000 feet. No alternative source of water is available in the area. The Jordan River/Surplus Canal is used primarily for industrial, irrigation (3 square miles), and recreational purposes.

In January 1986, the State requested the owner of Lot 6 and a number of other parties potentially responsible for wastes associated with the site to remove drums and other materials from Lot 6. When they refused, the State filed an action in Federal Court seeking the potentially responsible parties (PRPs) to remove the drums and compensate the State for its costs. In February 1986, the State and EPA negotiated a Consent Order under CERCLA section 106 for the drums.

In April 1986, during a CERCLA emergency removal action, EPA detected dioxin in drums, standing water, and soil on the site. In the removal action, EPA (1) excavated contaminated soil, (2) transported non-dioxin drums and soil and the cylinders to a hazardous waste landfill permitted under the Resource Conservation and Recovery Act, and (3) placed dioxin-contaminated materials in a temporary storage unit adjacent to Lot 6. EPA has reached a partial agreement with several PRPs to pay for a portion of the emergency action. The PRPs have also agreed to provide and maintain a storage facility for the dioxin materials pending final disposal.



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

C & R BATTERY CO., INC. Chesterfield County, Virginia

C & R Battery Co., Inc., occupies an approximately 4-acre site located 600 feet from the James River in an industrial area of Chesterfield County, Virginia. Between approximately 1969 and 1985, the company recovered lead and lead oxide from old automobile and truck batteries.

In 1982, the company detected high lead levels in an on-site monitoring well, in soils to a depth of 2 feet, and in drainage ditches leading to the James River.

Portions of the James River within 3 miles downstream of the site are used for recreation and designated as wetlands by the U.S. Fish and Wildlife Service. An estimated 1,200 people draw drinking water from private wells that tap the contaminated aquifer within 3 miles of the site. The nearest well is about 1,250 feet from the site.

The Commonwealth of Virginia took the first of numerous enforcement actions at the site on March 28, 1979. The Water Control Board issued an Administrative Order requiring a cleanup plan. The latest action was on December 3, 1984, when Virginia issued a court order requiring a cleanup plan, construction of a treatment plant, and reclamation of the site.

The Virginia Occupational Safety and Health Administration (OSHA) has also had extensive involvement with C&R Battery. During its first inspection in 1983, numerous violations of current OSHA standards were noted. Monitoring of the breathing zone at several work stations indicated lead well above the lead standard. In addition, some company employees were found to have elevated levels of lead in their blood. In 1985, Chesterfield County enjoined C&R Battery from further operation due to OSHA violations.

Using CERCIA removal funds, EPA took emergency action at the site in July 1986. Soils and pools on the site were limed to reduce acidity, some contaminated soils were excavated and stored pending final disposal, drainage controls were installed, and the site was graded, capped, and partially fenced.

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

DIXIE CAVERNS COUNTY LANDFILL Salem, Virginia

The Dixie Caverns County Landfill covers 27 acres in Salem, Roanoke County, Virginia. Roanoke County operated the landfill from 1955 to 1976, accepting municipal refuse, industrial sludge, nonhalogenated solvents, and other wastes.

In 1983, EPA observed uncontrolled leachate from the site entering local streams. In subsequent site investigations, EPA identified an uncontrolled pile of emission control dust from an electric steel furnace. The pile consists of an estimated 15,000 cubic yards of dust. The dust, which is migrating via surface drainage, contains high levels of lead and cadmium, according to EPA.

Conditions at the site threaten ground water and surface water. An estimated 2,100 people draw drinking water from private wells within 3 miles of the site. Dixie Caverns, a tourist attraction, is located 1 mile downstream of the site.

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

GREENWOOD CHEMICAL CO. Newtown, Virginia

Greenwood Chemical Co. started manufacturing specialty chemicals on a 15-acre site in Newtown, Albemarle County, Virginia, about 40 years ago. The facility ceased operation on April 18, 1985, after a toluene explosion/fire killed four workers. The site has had three owners. The present owner is a corporation whose major shareholder manages the plant.

In May 1985, the Virginia Department of Health inspected the site, which included five unlined lagoons where process waste water was treated. Various broken, leaking, and uncapped drums were observed. Soils were stained and vegetation stressed. Various aerial photos examined by the State revealed an area where drums had been buried in trenches for over two decades.

In May and June 1985, EPA detected chlorobenzene, benzene, and trichloroethylene in the lagoons, as well as in an off-site well down-gradient of the site. Wells within 3 miles of the site are the sole source of drinking water for an estimated 1,600 people. The nearest well is within approximately 600 feet of one of the lagoons.

Tests conducted by EPA in May 1985 detected volatile organic chemicals in air near the lagoons. The site, in a rural area west of Charlottesville, is surrounded by homes, farms, and community buildings.

Information in State files indicate that in 1971, fish were killed by overflows from the lagoons and that in the mid-1975s, cattle were killed. The files indicate that Greenwood Chemical used from 1 to 10 metric tons of cyanide per year.

The facility has a permit under the National Pollutant Discharge Elimination System for discharge of cooling water via surface drainage. The permit is independent of the lagoons.

The site threatens an unnamed tributary to Stockton Creek approximately 3,200 feet downslope from one of the lagoons and along the pathway of surface water migration. Stockton Creek is used for fishing.

EPA is currently conducting additional investigation of the site under the Superfund removal program.

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

H&H, INC., BURN PIT Farrington, Virginia

The H&H, Inc., Burn Pit covers approximately 1 acre 0.5 miles south of Farrington in Hanover County, Virginia. The site is owned by the former owner of Haskell Chemical Co. It was used exclusively by the company between 1960 and 1976 for disposal of solvents containing printing inks and of paint-manufacturing wastes. These materials were transported from the Haskell factory in Richmond to the site in drums, which were emptied into the shallow unlined pit and burned. As required by section 103(c) of CERCIA, Haskell reported to EPA that it had delivered an estimated 750 cubic feet of waste materials to the site. Virginia State Health Department files indicate that 1,000 empty drums were on-site prior to remedial activities undertaken in 1982.

EPA sampling in March 1984 indicated that PCBs are being discharged offsite via surface drainage. Also, toluene, xylene, and benzene are present in a monitoring well downgradient of the pit.

An estimated 2,700 people draw drinking water from private wells within 3 miles of the site. The nearest well is about 1,000 feet away.

Surface waters within 3 miles downstream of the site are used for fishing. A fresh-water wetland, as designated by the U.S. Fish and Wildlife Service, is within 3,000 feet of the pit.

Access to the site is unrestricted. Thus, people and animals can come in direct contact with hazardous substances at the site.

In response to enforcement actions by the Virginia State Department of Health, H&H, Inc., and Haskell removed contaminated soil, took measures to control erosion and sedimentation, and installed monitoring wells in 1982.

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

RENTOKIL, INC. (VIRGINIA WOOD PRESERVING DIVISION)
Richmond, Virginia

Rentokil, Inc. (Virginia Wood Preserving Division) has operated a wood-treatment facility on a 4-acre site in Richmond, Henrico County, Virginia, since 1965. Until about 1981, the company used creosote and pentachlorophenol as preservatives. In 1982, use of pentachlorophenol was discontinued, and chromated copper arsenate came into use. Creosote continued in use.

EPA has detected high concentrations of chromated copper arsenate in an unlined surface impoundment on the site. Rentokil has detected the same contaminant in run-off, soils, and a monitoring well on the site. An estimated 350 people draw drinking water from private wells that tap the contaminated aquifer within 3 miles of the site. The nearest private well, which is within 1,300 feet of the site, is not contaminated to date.

Run-off from the site enters North Run, which is used for swimming within 1.5 miles of the site.

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

SAUNDERS SUPPLY CO. Chuckatuck, Virginia

Saunders Supply Co. has treated wood on a site in Chuckatuck, Suffolk City County, Virginia, since 1964. From 1964 to 1984, the facility used a pentachlorophenol/No.2 Fuel Oil mixture as a wood preservative. Chromated copper arsenate was also used starting in 1974 and is still in use. The spent pentachlorophenol/oil mixture was disposed by burning in an unlined pit, which resulted in the generation of dioxin compounds.

Tests conducted by EPA in November 1984 detected elevated levels of chromium in Godwin's Mill Pond Reservoir, a source of drinking water for over 30,000 people in Suffolk, Virginia. A fresh-water wetland is within 1,000 feet downstream of the point where chromium was found. The tests also found pentachlorophenol, lead, chromium, and arsenic in the Columbia aquifer, which supplies private wells serving over 1,990 people within 3 miles of the site. The nearest well is approximately 1,900 feet from the site.

In 1983, the company excavated some contaminated soil and transported it to an EPA-approved landfill. A recovery well was drilled, and contaminated ground water is pumped out of the well and recycled back into a treatment system.

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

SPICKLER LANDFILL Spencer, Wisconsin

Spickler Landfill covered 80 acres in Spencer, a rural agricultural region of Marathon County, Wisconsin. In July 1970, the privately-owned landfill began operations under the name Spickler Landfill, disposing of both municipal and industrial wastes. A second owner operated the facility from April 1972 to November 1973, when it was sold to Mid-State Disposal, Inc. In July 1975, Mid-State Disposal sold the site back to the original owner, who then sold the property in February 1976 to still another person, who now operates the site as a tree nursery. The landfill was closed in the fall of 1976. Mid-State Disposal was involved in the closure.

The landfill was operated in three phases. In the first two phases, municipal wastes and asbestos dust were accepted. The landfill had no liner or leachate controls. When these phases ended, the area was capped with native clay soils. In early 1971, with the approval of the Wisconsin Department of Natural Resources, 1,281 cubic yards of mercury brine sludge from BASF Wyandotte Chemical Co.'s Nekoosa Plant were deposited at the site in a clay-lined pit measuring 100 X 100 feet and 10 feet deep. Later in the year, it was capped with clay. This pit has subsided, and water has ponded on top, as EPA observed during a June 1984 inspection. Leachate was seeping into a ditch adjacent to the site, thus threatening local surface water.

In late 1984, EPA installed monitoring wells around the site. In March 1985, both the upper aquifer and lower sandstone aquifer were found to be contaminated with a number of organic and inorganic substances, including mercury, barium, toluene, and ethylbenzene, according to EPA analyses. Within 3 miles of the site, the sandstone aquifer provides drinking water to 2,000 people via private wells. The owner's well is on the site.

The site is not fenced, making it possible for people and animals to come into direct contact with hazardous substances.

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

TOMAH ARMORY Tomah, Wisconsin

The Tomah Armory Site covers 10 acres northeast of Tomah, Monroe County, Wisconsin. From the early 1950s to 1955, the city operated the site as an open unlined dump, perhaps with open burning. During part of this period, the city had a similar operation about 2 miles to the south in what is now the Tomah Fairgrounds. The Tomah Fairgrounds is also being proposed for the NPL at this time.

Both Tomah sites accepted primarily municipal refuse. However, Union Camp Corp. notified EPA, as required by CERCLA section 103(c), that its polyethylene plant in Tomah had sent to the dumps up to 23,770 gallons of solvents and heavy metals, including lead and chromium components of ink wastes from the plant.

After the dump to the northeast stopped operating, the city sold part of the land to the Wisconsin National Guard for construction of an Armory. Homes were built on the rest of the land. According to the City's Director of Public Works, a portion or all of the dump was excavated and filled with sand before the buildings were constructed.

Tomah Armory is in a partly rural, partly residential area. A Veterans Administration Hospital is nearby. An estimated 9,500 people draw drinking water from public and private wells within 3 miles of the site. The nearest well is about 1 mile from the site.

The nearest downslope surface water, the South Fork of the Lemonweir River, is approximately 500 feet from the site. The river and Lake Tomah are used for recreation. Because the wastes were inadequately covered and there were no diversion structures, contaminated run-off from the dump could have reached nearby surface waters.

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

TOMAH FAIRGROUNDS Tomah, Wisconsin

The Tomah Fairgrounds Site covers 10 acres southwest of Tomah, Monroe County, Wisconsin. From 1953 to 1959, the city operated the site as an open unlined dump, perhaps with open burning. During this period, the city had a similar operation about 2 miles away where the Tomah Armory is now located. The Tomah Armory is also being proposed for the NPL at this time.

Both Tomah sites accepted primarily municipal refuse. However, Union Camp Corp. notified EPA, as required by CERCLA section 103(c), that its polyethylene plant in Tomah had sent to the dumps up to 23,770 gallons of solvents and heavy metals, including lead and chromium components of ink wastes from the plant.

After the dump to the southwest stopped operating, the city covered the dumping area. The 10 acres became part of the Toman Fairgrounds.

Tomah Fairgrounds is in a partly rural, partly residential area. An estimated 9,500 people draw drinking water from public and private wells within 3 miles of the site. The nearest well is about 0.6 miles from the site.

The nearest downslope water, Lake Tomah, is approximately 400 feet from the site. The lake is used for recreation. Because the wastes were inadequately covered and there were no diversion structures, contaminated run-off from the dump could have reached nearby surface waters.

In an inspection conducted in August 1984, EPA observed areas where erosion had worn away some of the soil, revealing rusted metal. Thus, people and animals can potentially come into direct contact with hazardous substances.

