United States
Environmental Protection
Agency

Office of Public Affairs
Region 5
230 South Dearborn Street
Chicago, Illinois 60604

Illinois Indiana
Michigan Minnesota
Ohio Wisconsin

Superfund Fact Sheet

Summary of Cleanup Actions at the Schmalz Dump Superfund Site Harrison, Wisconsin July 1989

This fact sheet will tell you about:

- **The history of the site**
- **Cleanup action completed to date**
- **Cleanup action planned for the future**
- **Settlement with a Potentially Responsible Party**
- **How to get more information**

In September 1988, the U.S. Environmental Protection Agency (U.S. EPA) completed an initial, short-term cleanup action at the Schmalz Dump site in Harrison, Wisconsin. U.S. EPA is now prepared to continue the long-term cleanup action that will minimize the risks to public health and the environment from contamination at the Schmalz site. This fact sheet summarizes the history of the Schmalz Dump site, describes the cleanup action completed to date, and details the progress of the long-term cleanup measure.

These actions at the Schmalz Dump site have been authorized and funded under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), better known as "Superfund," which was amended and reauthorized by Congress in October 1986.

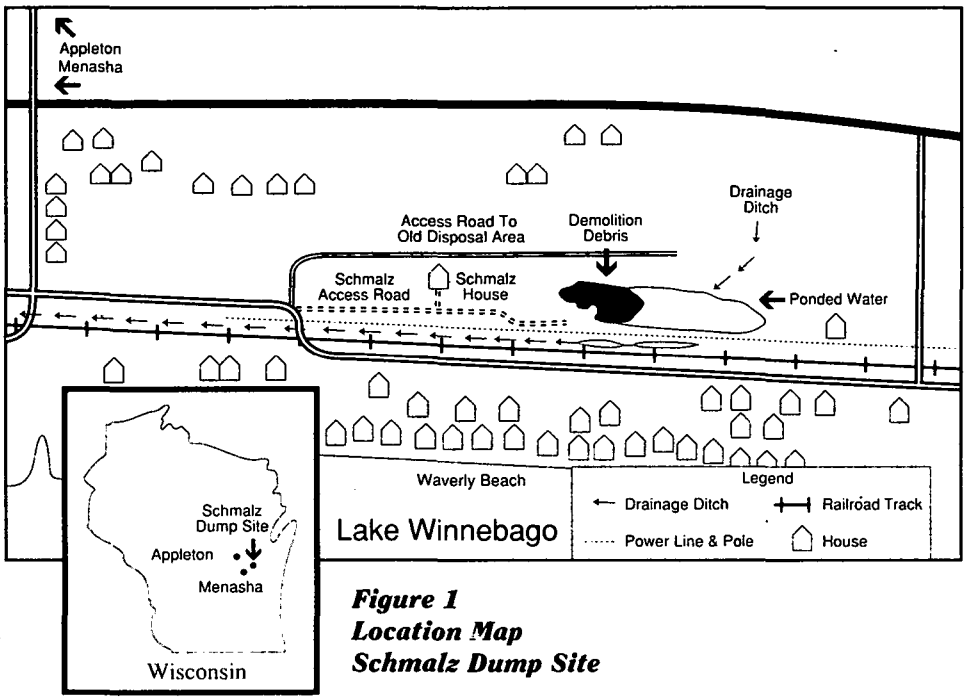

Figure 1
Location Map
Schmalz Dump Site

■ Brief History of the Schmalz Dump Site

The Schmalz Dump site is located on the north shore of Lake Winnebago in Harrison, Wisconsin (Figure 1). The seven-acre site includes about one-half acre of wetlands on property now owned by Gregory Schmalz. Industrial wastes had been dumped for decades in and around the site. In late 1978, former owner Gerald Schmalz began accepting building debris and demolition wastes from the Allis-Chalmers Corporation. It was later found by the U.S. Army Corps of Engineers and the U.S. Soil Conservation Service that part of the Allis-Chalmers debris on the site was contaminated with **polychlorinated biphenyls (PCBs)**, in concentrations ranging from one part per million (ppm) to greater than 3,000 ppm (EPA considers exposure to PCBs to be a health risk). In addition, various heavy metals were of concern to

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Note: Words in **bold face** are defined in the glossary on the back page.

Short-Term Cleanup Action

The short-term cleanup of the Schmalz Dump Site began in the fall of 1987. The general purpose of the cleanup, performed by a company contracted by U.S. EPA, was to remove and dispose of all PCB-contaminated debris and the underlying sediment. This project was completed in two phases. Phase I consisted of excavating the contaminated debris and sediment, loading it on covered dump trucks, and transporting the material to a licensed waste storage area. Because much of the debris was located in the wetland areas of the site, material had to be dewatered before being loaded for shipping. Dewatering simply involves taking out excess water in order to create a more solid matter. Phase II, which began in the spring of 1988, primarily consisted of treating the contaminated pond water located on the site, the water removed during the dewatering process, and other contaminated wastewater generated by site cleanup procedures.

Phase I

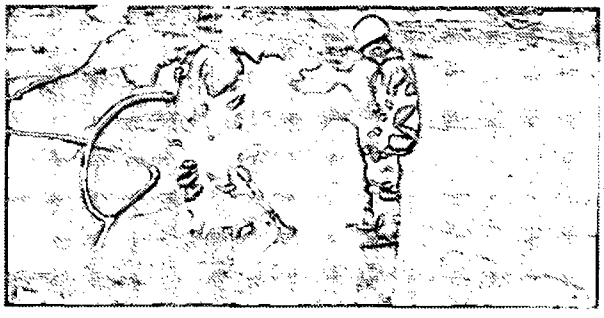
The U.S. EPA contractor began the project by clearing trees and shrubs for roads and work areas. Grading was also necessary to provide level working areas for the equipment and personnel. With this done, the contractor began road construction; built steel sheet-piling containment walls on the west and south ends of the pond; installed a dewatering and loading area; expanded the perimeter fence; and established water, electrical, and telephone service.

With this site preparation completed, the process of debris excavation and removal began on December 6, 1987, and lasted five days. Demolition materials (mostly concrete, wood, bricks, stumps, and general solid debris) were excavated, dewatered, and loaded onto trucks. Most of this debris was taken to a U.S. EPA-approved landfill in Williamsburg, Ohio.

Phase II

Because the remaining cleanup primarily involved treating contaminated water, the contractor waited for the arrival of warmer spring weather to complete the project. Phase II began with the building of a water treatment facility. While this plant was under construction, mechanical dredging of the pond sediment began on June 1, 1988. The contractor used a crane with a special attachment called a clamshell bucket to remove the pond sediment and pile it on the dewatering area. The dewatered sediment was then loaded and shipped to a landfill that accepts PCBs. To treat the contaminated water left after the dewatering process, the contractor separated and disposed of solids in contaminated water and then finely filtered the resulting "clean" water. Pond sediment and the remaining surface water were tested by the contractor for PCB content. When testing yielded results of PCB concentrations less than 1 ppm, the treated water was pumped back into the pond.

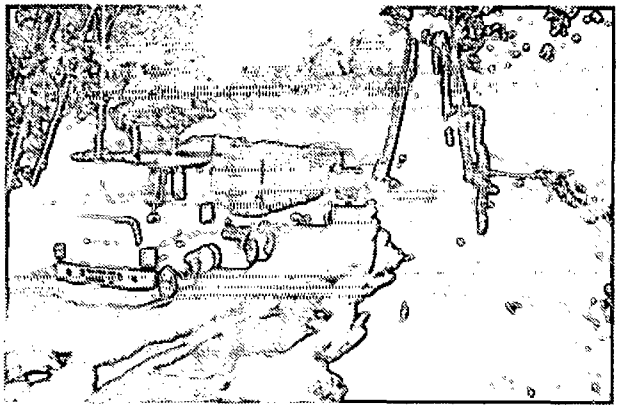
After treating the water, the contractor removed contaminated material still left at the site. Protective clothing, plywood walls, and liners for the filtration materials were removed and disposed. Site closure activities, such as disconnecting the utilities, removing all support area facilities, and removing equipment, were carried out. The contractor completed on-site cleanup activities and site closure by September 2, 1988.



Workers collect contaminated sediment for treatment during Phase II.

In total, more than 4,500 tons (over 145 truckloads) of contaminated materials were removed from the Schmalz Dump site. Most of this material was disposed of at three U.S. EPA-approved facilities in Ohio, Indiana, and Illinois. The amount of material actually disposed of was less than projected because the contractor, with the approval of U.S. EPA, decided to leave the concrete water treatment and dewatering/loading areas in place. Originally, these areas were to be broken up and disposed of at a landfill that accepts PCBs. Both areas were left in place, however, after being decontaminated by steam cleaning and then tested. Being found free of PCBs, the areas were covered with gravel. This cost-effective decision helped the project to be completed under the budgeted amount. The entire process cost about $2.3 million, as compared to the originally estimated budget of $2.45 million.

With the removal of all PCB-contaminated debris at the Schmalz dump site completed, U.S. EPA plans to begin construction of the long-term cleanup by spring of 1990.



PCB-contaminated material is loaded on trucks to be transported to an EPA-licensed storage facility.
(Photos courtesy of Camp Dresser & McKee, Inc.)

Long-Term Cleanup Action

In 1987, after examining the benefits of six alternative cleanup measures, U.S. EPA chose a soil cover as the preferred measure for the Schmalz Dump site. Consisting of a three-layer protective cap (Figure 2), the soil cover will be built over the dry portions of the site. A layer of clean soil will directly cover the contaminated soil and debris, and this layer will be covered by two feet of compacted clay. A six-inch vegetative layer forms the top of the cover and will be sloped to provide adequate drainage and seeded to prevent erosion. The soil cap will cost around $1 million.

Once the cap is constructed, U.S. EPA will continue regular ground water sampling and testing for at least five years to detect any changes in ground water quality over time. After that five-year period, ground water sampling will continue, but as needed on a less frequent basis—unless the site is taken off the NPL.

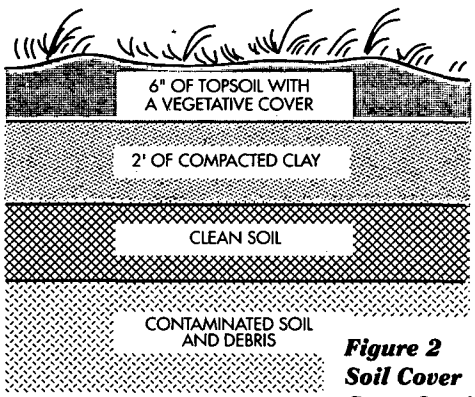


Figure 2 Soil Cover Cross-Section

History continued from page 1

U.S. EPA as potentially threatening public health. **Lead** and **chromium** levels exceeding federal drinking water standards were detected in surface water and **ground water** samples, and elevated levels of lead were found in **sediment** samples.

In 1984, the Schmalz Dump site was placed on U.S. EPA's National Priorities List (NPL), a roster of hazardous waste sites throughout the country that are eligible for the Superfund program. In 1985, U.S. EPA fenced in a portion of the site, and a Record of Decision (ROD) was signed, authorizing the short-term cleanup action. A ROD documents the action plan for the remedy chosen for a site and provides background on the decision. A long-term Remedial Investigation and Feasibility Study (RI/FS) was conducted by U.S. EPA from 1985 through 1987. A second ROD, authorizing the long-term cleanup, was signed in 1987. U.S. EPA also performed numerous activities to keep the public up to date and provide the opportunity for community input on site activities. Three previous fact sheets have been released, and two public meetings were held in May and August of 1987. A public comment period on the proposed cleanup was held in August and September of 1987.

Settlement with a Potentially Responsible Party

During the course of any Superfund site cleanup, U.S. EPA conducts a search for Potentially Responsible Parties (PRPs), those parties who may be responsible for the waste contamination problem. Once identified, PRPs are asked to pay for the cleanup.

The Allis-Chalmers Corporation, once Wisconsin's largest employer, was identified as one of eight PRPs at the Schmalz site. In a recent settlement with U.S. EPA, Allis-Chalmers agreed to pay $2 million to help clean up the Schmalz Dump site. This figure was part of a settlement of $4.5 million, which resolves U.S. EPA's claims against Allis-Chalmers at 12 sites nationwide where the company allegedly shipped hazardous wastes. Other Wisconsin sites included in the settlement are the Muskego and Brookfield Sanitary Landfills. Allis-Chalmers, which once employed 30,000 people around the world, is emerging from bankruptcy with a machine repair business in Houston, Texas, as its only operation.

Recovery of cleanup costs by U.S. EPA makes more money available in the Superfund to clean up other sites where PRPs have not been identified or decline to pay for the cleanup.

Mailing List

If you would like to be included on U.S. EPA's mailing list for the Schmalz Dump site, please fill out, detach, and mail this form to:

Susan Pastor
Community Relations Coordinator
Office of Public Affairs
U.S. Environmental Protection Agency
230 South Dearborn Street
Chicago, IL 60604

Name _____

Affiliation _____

Address _____

City _____ State _____ Zip _____

For More Information

U.S. EPA Contacts

The following U.S. EPA personnel may be contacted if you have further questions about the Schmalz Dump Superfund site:

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Superfund Division of
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(312) 353-6284

Jerome Kujawa
Assistant Regional Counsel
Office of Regional Counsel
(312) 886-6731

Information Repositories

Information repositories contain laws, work plans, community relations plans, technical reports, and other documents relevant to the investigation and clean-up of Superfund sites. Information repositories for the Schmalz Dump Superfund site have been set up at the following locations:

Fox Valley Library
West Building
University of Wisconsin
1478 Midway Road
Menasha, WI 54952-8002
(414) 832-2672
Contact: April Kain-Breese
Library Director

Town of Harrison
W5971 Manitowoc Road
Appleton, WI 54915
(414) 989-1062
Contact: George Schwalbach
Chairman

U.S. EPA Region V
230 South Dearborn ■ Chicago, IL 60604

Toll Free:
1-800-621-8431
9:00 a.m. to 4:30 p.m. Central Time

Glossary

Chromium ■ A metal used in electroplating, photography, and paint production that can cause hemorrhages and lung and other respiratory cancers.

Ground Water ■ Water contained in rock, soil, sand, or gravel beneath the earth's surface. When it exists in a sufficient quantity, ground water can be used as a drinking water supply.

Lead ■ A metal used as a gasoline additive, and in storage batteries, foil, solder, and construction equipment. Studies on laboratory animals have shown that exposure to lead may result in an increase in reproductive complications and cancer tumors.

Polychlorinated Biphenyls (PCBs) ■ A family of organic compounds used in electric transformers as insulators and coolants, in lubricants, carbonless copy paper, adhesives, and caulking compounds. PCBs are stored in the fatty tissues of humans and animals through the bioaccumulation process. EPA banned the use of PCBs in 1976.

Sediment ■ Material that settles to the bottom of a stream, creek, lake, or other body of water.

EPA

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