NPL Site Narrative for Sherwood Medical Co.

SHERWOOD MEDICAL CO. Norfolk, Nebraska

Conditions at Proposal (July 29, 1991): Sherwood Medical Co., a subsidiary of American Home Products Corp., has manufactured disposable medical supplies since 1962 at a plant on Highway 81 located 1.5 miles south of Norfolk, Madison County, Nebraska. The plant covers 40 acres and is in an area with agricultural, residential, and commercial development. As now defined, the site encompasses 60 acres, including the plant property and nearby wells contaminated with volatile organic compounds.

On the Sherwood plant is an unlined pond where, according to the company, treated and untreated waste water has been discharged since 1963. In 1988, EPA detected 1,1-dichloroethane (1,1-DCA), 1,1,1-trichloroethane (1,1,1-TCA), 1,1-dichloroethene (1,1-DCE), and tetrachloroethene (PCE) in the discharges.

From 1961 until early 1967, the floor drains from the tool room, which was the principal area where 1,1,1-TCA was used, discharged into Sherwood Lake. In early 1967, the drains were rerouted to a concrete catch basin and then to septic system leach fields on the west side of the plant. In March 1969, the discharge from the drain was diverted into the 2,000-gallon underground storage tank and then to the leach fields. This arrangement continued until early 1974, when use of the leach fields was discontinued following installation of the sewage treatment system for the plant. Discharges from the tool room continued to go to the tank from 1974 through September 1989, when the tank was removed from service under an Administrative Order on Consent EPA issued on September 6, 1989, under CERCLA Section 106. A local pumping service had periodically emptied the tank during 1974-89.

Approximately 7 gallons of solvents per month were placed in the tank from 1969 through approximately 1978. 1,1,1-TCA, PCE, and 1,1-DCA were detected in the tank when it was removed from service, probably due to sludge residues that settled at the bottom of one end of the tank. The tank also received larger volumes of diluted, nonhazardous waste caustic along with waste water from the tool room during 1969-89.

A reconnaissance-level geophysical survey conducted by EPA indicated another area where drums of waste solvents may have been buried.

The Nebraska Department of Health and EPA sampled local wells several times from October 1987 to January 1989. Trichloroethene, 1,1,1-TCA, 1,1-DCE, 1,1-DCA, and PCE were found in Sherwood Well #5 (used for industrial purposes) and in the main well providing drinking water to Park Mobile Home Court (PMHC). An estimated 5,900 people currently obtain drinking water from public and private wells within 4 miles of the site. Wells within 3 miles irrigate 1,580 acres of land used primarily to grow corn for livestock consumption. Two EPA soil gas surveys conducted in July 1988 and January 1989 indicate that contamination is moving north/northeast, in the direction of ground water flow, into PMHC's main well and backup well.

Using CERCLA emergency funds, EPA supplied bottled water to PMHC during February 1988. Then EPA installed a temporary carbon treatment system on the PMHC water system, ending the need for bottled water. In September 1989, under the CERCLA order, Sherwood removed PMHC's main well and backup well from service and installed a carbon treatment system on a much less contaminated municipal well, making the water safe for consumption.

On March 21, 1991, EPA and Sherwood entered into an Administrative Order on Consent under CERCLA Sections 104 and 122(d)(3). Under the order, Sherwood is conducting a Remedial Investigation/Feasibility Study to determine the type and extent of contamination at the site and identify alternatives for remedial action. Field work began in April 1991.

Status (October 1992): Sherwood has completed field work on the Remedial Investigation (RI), and conducted a treatability study on the soil gas extraction system. Sherwood expects to deliver a draft RI to EPA late in the year.

For more information about the hazardous substances identified in this narrative summary, including general information regarding the effects of exposure to these substances on human health, please see the Agency for Toxic Substances and Disease Registry (ATSDR) ToxFAQs. ATSDR ToxFAQs can be found on the Internet at ATSDR - ToxFAQs (http://www.atsdr.cdc.gov/toxfaqs/index.asp) or by telephone at 1-888-42-ATSDR or 1-888-422-8737.