NPL Site Narrative for Armour Road

ARMOUR ROAD
North Kansas City, Missouri

Federal Register Notice: May 10, 1999

Conditions at Proposal (January 1999): The Armour Road site is located in North Kansas City, Missouri, at 2251 Armour Road in Clay County. The site is currently inactive and consists of a 25,000 square foot building and a mostly paved lot located on approximately 1.8 acres in a highly commercialized/industrialized area of the City.

The site was used for herbicide manufacturing, blending and distributing operations between 1948 and 1986. Herbicides were produced at the site for use by the railroad industry to eliminate or control vegetation along railroad tracks. Three companies manufactured, blended or distributed herbicides at this location: Reade Manufacturing Company, Inc. (Reade); U.S. Borax, Inc.; and Habco, Inc. During the Reade operation (1948-1963), raw materials were generally transported to the site in railroad cars where they were mixed in above and below ground tanks to produce various herbicide blends. U.S. Borax (1963-1968) leased the property from Reade and continued essentially the same operation. Raw materials used on site between 1948 and 1968 included powdered arsenic (95% pure), caustic soda, chlorates, sodium chlorate, borax, 2,4-D, pentachlorophenol, and fuel oil.

Habco, Inc. purchased the property from Reade in 1968 and

changed the operation from manufacturing herbicides to largely a repackaging operation whereby bulk containers of raw materials were repackaged into smaller 5, 10, and 30-gallon containers for blending in the field. Habco, Inc. reportedly used monosodium methyl arsenate (MSMA), sodium chlorate, sodium metaborate, Telvar, and Karmax DRUG FREE Herbicide. Water soluble materials such as 2,4-D and 2,4,5-T were blended on site. In 1986, the site became inactive when Habco, Inc. sold the site to the K.C. 1986 Limited Partnership.

Contamination was originally identified during an environmental assessment conducted in 1989 for a potential buyer of the site. The investigation revealed elevated levels of 2,4-D, pentachlorophenol, 2,4,5-T, and arsenic in the soil and ground water at the site. Subsequent investigations confirmed the presence of these substances at elevated levels in soil and ground water. Arsenic has been detected in surface soils at levels up to 121,000 parts per million (ppm) and in ground water at levels up to 383 ppm.

In April 1996, the Missouri Department of Natural Resources (MDNR) recommended that the U.S. Environmental Protection Agency (EPA) Region 7 conduct actions to address the contamination and reduce the threat to human health posed by potential exposure to arsenic-contaminated surface soil at the site. EPA conducted additional sampling and covered the most highly contaminated areas with plastic sheeting and gravel. Fencing was erected around the site to restrict public access.

The Armour Road site is located in the flood plain of the Missouri River above a highly productive ground water aquifer used by communities along the River as a source of drinking water. Kansas City, North Kansas City, and Gladstone, Missouri all draw water from the aquifer to supply their public water systems using wells located within 4 miles of the site. The total population supplied with drinking water by these systems is approximately 670,000.

Status (May 1999): EPA is considering various alternatives for the site.

[The description of the site (release) is based on information available at the time the site was evaulated with the HRS. The description may change as additional information is gathered on the sources and extent of contamination. See 56 FR 5600, February 11, 1991, or subsequent FR notices.]

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 http://www.atsdr.cdc.gov/toxfaq.html or by telephone at 1-888-42-ATSDR or 1-888-422-8737.