

NPL Site Narrative for Pools Prairie

POOLS PRAIRIE Neosho, Missouri

Conditions at Proposal (January 19, 1999): The Pools Prairie site (formerly referred to as the Neosho Wells site) is adjacent to Neosho, Newton County, Missouri, in southwest Missouri. The site was discovered in July 1994 by the Newton County Health Department (NCHD) through a citizen's complaint of gasoline contamination in the family's well located west of Highway 71 on Quince Road, southwest of the Neosho city limits. The citizen suspected gasoline contamination was coming from a truck plaza located immediately north of the citizen's house. In August 1994, subsequent sampling by NCHD and the Missouri Department of Natural Resources (MDNR) at the truck plaza, the family's well, and at other nearby residential wells determined that there were no leaking tanks at the truck plaza; however, eight volatile organic compounds (VOCs), including trichloroethylene (TCE) and carbon tetrachloride were found in the 10 private wells sampled. The most common VOC found in the wells and at the highest concentration was TCE. From August to December 1994, MDNR and NCHD continued to sample and resample residential wells in the area of Highway 71 and Quince Road. Additional residential wells were found to contain TCE, with some concentrations found above the TCE maximum contaminant level (MCL) of 5 parts per billion (ppb) in the area located along roads HH and TT and near the intersection of Highways 71 and 60.

Since November 1994, over 200 residential wells, community wells, city water supplies, and commercial business wells have been sampled by EPA, MDNR, or NCHD. Approximately 36 residential wells exhibited TCE or carbon tetrachloride at levels at or above the maximum contaminant levels (MCLs) of 5 ppb. TCE concentrations in monitoring wells on site ranged from 0.5 - 200,000 ppb, and TCE concentrations in residential wells ranged from 5.4 - 210 ppb. Carbon tetrachloride concentrations in monitoring wells and residential wells ranged from 0.7 - 14 ppb. In addition, approximately 35 residential wells and one community well (serving approximately 52 residents) exhibited TCE at levels less than 5 ppb.

EPA and the State have conducted several investigations on site to collect ground water and soil samples and to identify potential sources of the contaminants detected in private drinking water wells. Five source areas have been identified at the Pools Prairie site for which adequate documentation exists to attribute the VOCs found in ground water to the site. To identify the sources of VOC ground water contamination, EPA and MDNR first investigated the area south of Neosho, known as the Crowder Industrial Park, and later investigated the area known as the former Fort Crowder Military Reservation (Camp Crowder). The five sources identified are: Source 1 - Engine Testing Area (ETA) at the Rocketdyne test site; Source 2 - Components Testing Area (CTA) at the Rocketdyne test site; Source 3 - Contaminated soil at the CTA; Source 4 - Sabreliner Plant (Main Facility); and Source 5 - Sabreliner 900 Building.

Two aquifers are present in the Neosho area which are separated by a confining layer of shale: a shallow aquifer (consisting of residuum and limestone bedrock) that has been documented as a karst aquifer, and a deep aquifer (consisting of limestones, dolomites, and sandstone) that is not karst. Both of the aquifers are used for drinking water purposes by residences outside of the Neosho city limits, but contamination has only been documented in the shallow aquifer. Only the shallow aquifer has been evaluated in the Documentation Record because there is insufficient evidence to document that the two aquifers are interconnected. More than 2,000 people are served by drinking water from this aquifer in the general area of the site.

To date, potentially responsible parties (PRPs) have performed removal work under several enforcement agreements, such as installation of whole house treatment units for approximately 40 homes, containment at lagoons at the Components Testing Area, and construction of more than 5 miles of water main to connect approximately 230 homes to the city of Neosho water supply (25% complete).

The listing process itself is not intended to define or reflect the boundaries of facilities or releases. For clarification, at the time of listing the site boundaries for the Pools Prairie site include those areas to which the ground water contamination plume has migrated and known surface sources as described herein. It does not include surface and unsaturated subsurface soils unless those soils are also contaminated.

Status (September 1999): A soil removal and ground water containment is planned at the Quince Road area. The National Guard Bureau began a removal at the Engine Testing Area in early summer of 1999. This consists of removing liquid wastes from the pit that were present at the time the pit was backfilled. The liquid waste in the waste pit contains TCE, DCE, and vinyl chloride at levels up to 250,000,000 ppb. Approximately 8,200 gallons have been pumped to date.

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) (<http://www.atsdr.cdc.gov/toxfaqs/index.asp>) or by telephone at 1-888-42-ATSDR or 1-888-422-8737.