NPL Site Narrative for Oak Grove Village Well

OAK GROVE VILLAGE WELL Oak Grove Village, Missouri

Conditions at proposal (September 13, 2001): The Oak Grove Village Well site is located in Oak Grove, Franklin County, Missouri. The site consists of a trichloroethylene (TCE) and tetrachloroethylene (PCE) chlorinated solvent ground water plume with no identified source. The plume has impacted the municipal well which serves as the sole source of drinking water for residents in Oak Grove Village. Oak Grove Village is a small community, population ranging from about 402-421, located adjacent to Highway 44, approximately one mile northeast of Sullivan. The site initially was identified in 1986 following the detection of TCE and PCE in samples collected from the well by the Missouri Department of Natural Resources (MDNR). The site is being placed on the NPL because contaminant concentrations in excess of health-based benchmarks have been detected in the Oak Grove Village well, forcing closure of the well. Residents of Oak Grove Village currently purchase water from the town of Sullivan.

Following the original detection of TCE in 1986, MDNR continued to sample the Oak Grove Village well and distribution points within the municipal system on a quarterly basis until October 1990. Concentrations of TCE in the Oak Grove Village well have ranged from 2.4 μ g/L to 18 μ g/L. TCE concentrations have exceeded both the screening concentration for cancer (7.7 μ g/L) and the maximum contaminant level (MCL) (5.0 μ g/L). PCE concentrations have ranged from 16 μ g/L to 59 μ g/L. Two samples from the Oak Grove Village well contained PCE at concentrations that exceed both the screening concentration for cancer (1.6 μ g/L) and the MCL (5.0 μ g/L).

Due to the elevated concentrations of TCE and PCE, the Oak Grove Village well was closed from July 1991 to September 1992. During this period, Oak Grove Village purchased water from the Sullivan municipal water supply. In September 1992, Oak Grove Village reopened the Oak Grove Village well and discontinued service with Sullivan. MDNR continued quarterly sampling after the Oak Grove Village well was put back into service. The well again was closed in January 1994 due to elevated concentrations of TCE and PCE. Since its final closure in 1994, the Oak Grove Village well has been capped.

Several investigations, including a Site Inspection (SI), an Expanded Site Inspection (ESI), and investigations by private companies, have focused on identifying the sources of the chlorinated solvent ground water plume that has impacted the Oak Grove Village well. These investigations identified the Sullivan Landfill, the TRW Ramsey facility (a RCRA site), and two automobile service stations as potential sources of TCE. Based on currently available information, however, the contamination detected in the Oak Grove Village well cannot be conclusively attributed to any of these potential sources.

Although the Oak Grove Village well is no longer in use due to the contamination, the ground water plume also poses a threat to the population served by the nearby Sullivan municipal drinking water wells. Over 6,000 people currently receive drinking water from Sullivan municipal wells or private wells located within four miles of the Oak Grove Village Well site.

Status (September 2002): EPA is considering various alternatives for this site.

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.