NPL Site Narrative for Jones Road Ground Water Plume

JONES ROAD GROUND WATER PLUME Harris County, Texas

Conditions at Proposal (April 30, 2003): The Jones Road Ground Water Plume site is located approximately one-half mile north of the intersection of Jones Road and FM 1960 in a mixed residential, urban/light industry area outside the city limits of northwest Houston, Harris County, Texas. The site is being proposed to the NPL based upon the presence of hazardous substances, including cis-1,2-dichloroethene (DCE), tetrachloroethene (PCE), and tricholorethene (TCE), in drinking water wells. PCE has been detected in drinking water wells above EPA's Maximum Contaminant Level (MCL) of 5.0 μg/L.

During a routine sampling of public wells by the TCEQ Houston Region Office in December 2000, PCE, DCE, and chloromethane were detected in a public well supplying drinking water to approximately 18 employees, 90 children in childcare, and 150 to 200 students at a gymnasium. Subsequent samples collected on January 25 and May 2, 2001 confirmed the presence of PCE, DCE, and chloromethane in the public drinking water supply well.

During the Site Inspection in March and April of 2002, the Texas Commission on Environmental Quality (TCEQ) collected samples from 43 wells in Harris County and found concentrations of PCE at or above the MCL in 8 wells. Concentrations of PCE in ground water samples were as high as 128 μ g/L. As a result, filtration systems have been placed on those 8 wells.

The source of the PCE, TCE, and DCE contamination is unidentified, though previous investigations have suggested several potential source areas near the affected drinking water wells. There are several businesses within the area that use chlorinated solvents. In June 2001, a Phase I Environmental Assessment was conducted at Bell Dry Cleaners and leakage was discovered from a dry cleaning machine at Bell Dry Cleaners into the storm drains. This facility is over 1,000 feet north of the public supply well at the gymnasium. PCE and vinyl chloride was found in ground water and soil samples collected from the Bell Dry Cleaners facility during the Environmental Assessment. On May 1, 2002, TCEQ initiated an Emergency Order which directed the owner of Bell Dry Cleaners and the owner of the property to, among other actions: maintain the current filtration systems; sample all wells within a half mile of the facility and add filtration systems to any new wells with contamination; investigate and report on the nature and extent of the contamination; and conduct any necessary further investigation. In May 2002, Bell volunteered to stop using PCE. On August 21, 2002, an Order was issued affirming modifications to the May 1, 2002 Emergency Order. This ordered the facility and property owners to: (1) continue cessation of all use of PCE at that location, (2) grant access for remediation, and (3) add a deed restriction to the shopping center property that prohibits use of PCE. However, the owner of the facility and the property owner were determined to be incapable of proceeding with remediation due to lack of funds.

Based on samples collected from March to December 2002, 228 wells have been sampled in the area including and surrounding the Jones Road Ground Water Plume site. Of these wells, 23 wells have had detections of PCE at or above the Environmental Protection Agency's Maximum Contaminant Level (MCL)

of 5 parts per billion (ppb). Filtration systems have been placed on the 23 wells with levels of PCE at or above the MCL. Eighteen wells have had detections of PCE below the MCL.

Public and private drinking water wells serving residents, workers, and students have been found to be contaminated with chlorinated solvents above MCLs and other EPA health-based drinking water standards.

Status (September 2003): 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.