NPL Site Narrative for Lammers Barrel

LAMMERS BARREL
Beavercreek, Ohio

Conditions at Proposal (September 5, 2002): The Lammers Barrel property is now a vacant lot, approximately two acres in size, located in Beavercreek, Ohio. The property is bisected by Little Beaver Creek which flows west to east through the site. The property is bordered to the west and south by Grange Hall Road and East Patterson Road, respectively. An abandoned railroad right of way makes up the northern border. The facility experienced a fire in 1969, that completely destroyed the buildings. The only structures remaining are a concrete pad, a non-functional production well, and pipes that appear to run from the former facility to the creek.

Operations began at Lammers Barrel Factory in 1953 and continued until the fire in October 1969. According to former employees, the facility bought, sold and reclaimed all types of solvents. Any inventories of chemicals handled at the facility were reportedly destroyed in the fire. During operation, the facility had an above-ground storage capacity of over 500,000 gallons. This consisted of eighteen vertical tanks, ranging in size from 2,500 to 25,000 gallons and approximately 6,000 55-gallon drums.

Sampling of residential wells began in the mid-1980s. In 1985, analyses of approximately 90 residential well samples throughout Beavercreek identified an area of ground water contamination along the northern end of the Valleywood subdivision, located southeast of the facility. Sampling revealed that the presence of vinyl chloride was above the federal maximum contaminant level (MCL) for drinking water in some wells. Several wells contained other volatile organic compounds (VOCs), such as chloroethane, 1,2-dichloroethene, perchloroethylene, and trichloroethylene. As a result, the Ohio National Guard brought a 350-gallon mobile water tank as an emergency water supply to five homes along Patterson Road. Nine homes that exceeded removal action levels of VOCs in drinking water were subsequently connected to the county municipal water system.

Periodic ground water sampling has continued since 1985, resulting in the extension of the county water line or installation of filtration systems at several homes. Sampling efforts in 1988, 1991 and 1997 show that the contaminated ground water plume has advanced into the adjacent Valleywood subdivision. In 1992, Ohio Environmental Protection Agency conducted a Site Inspection (SI) at the site. Six soil samples, four sediment and four surface water samples from Little Beaver Creek were collected along with additional residential well samples. The six soil samples from the site indicate the presence of VOCs, lead and polychlorinated biphenyls (PCBs). The creek sediment samples revealed low concentrations of xylenes and heavy metals.

An Engineering Evaluation/Cost Analysis (EE/CA) was prepared for the U.S. EPA in 1997. Soil, sediment and ground water samples were collected in March, April, June and August of 1997. A total of 71 residential well samples from 54 homes were collected. VOCs were detected in 28 of the wells sampled serving 54 homes. Most of the homes sampled had been sampled in previous investigations. Some samples were collected from residential wells at homes that had already been connected to the municipal system to identify the extent of the plume. Sediment samples collected from Little Beaver Creek identified the presence of VOCs and semi-volatile organic compounds (SVOCs).

Soil contaminant concentrations indicate two potential source areas for ground water contamination, on each side of Little Beaver Creek. Both areas of subsurface soil contamination lie near the level of the water table. Similar VOCs were detected in both on-site soil and monitoring well samples, and off-site residential well samples. Concentrations of VOCs in on-site soils indicate that they may be the source of the ground water contamination plume.

Similar contaminants were also detected in on-site sediment and soil samples, indicating that the site may actually be impacting the sediments and associated water quality of Little Beaver Creek. Little Beaver Creek flows into the Little Miami National and State Scenic River, a popular recreation and wildlife area. Possible targets along the river in the vicinity of the site include a human food chain fishery, wetlands and a state threatened species.

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.