NPL Site Narrative for Nineteenth Avenue Landfill

NINETEENTH AVENUE LANDFILL Phoenix, Arizona

Conditions at listing (October 1981): The 19th Avenue Landfill covers approximately 125 acres in Phoenix, Arizona, on the northern edge of the Salt River at 19th Avenue. In the past, sand and gravel companies excavated material along a 7-mile stretch of the river to depths of up to 90 feet. Phoenix took over several of these pits for use as waste disposal sites. The 19th Avenue Landfill accepted municipal refuse and unknown quantities of industrial waste, including heavy metals, solvents, and pesticides, from 1954 until 1979. Liquids and sludges were disposed of in temporary impoundments.

Portions of the landfill are within the 100-year floodplain of the Salt River. Early in 1979, the river flooded, raising the water table and filling several pits. The high water also breached several dikes, opening landfill cells and causing refuse to wash into the river, and allowed water to infiltrate directly into the cells, increasing the potential for leachate movement. Studies by the State have shown that leachate is being generated and is contaminating ground water. In addition, saturation of the waste has resulted in the generation of excess amounts of methane gas. Lateral migration of the gas has created a potential explosion hazard in the adjoining community.

A series of court actions initiated by the State against Phoenix in 1979 resulted in consent and court orders requiring the city to install wells to monitor ground water and a system to collect and discharge methane. In addition, the city was required to monitor structures adjacent to the site for gas hazards; study the nature, composition, and volume of hazardous wastes at the site; and permanently close the site.

Status (July 1983): The State continues to monitor the city's progress at the 19th Avenue Landfill. The city has closed the site and installed monitoring wells, a 3-foot cap, a fence, and a methane collection system, and plans to install a dike at the river boundary of the landfill. The city has commissioned a consultant to do a site assessment and propose remedial action. The consultant's report is expected in the fall of 1983.

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.