NPL Site Narrative for Minot Landfill

MINOT LANDFILL Minot, North Dakota

Conditions at proposal (June 24, 1988): The old Minot Landfill covers approximately 45 acres and is 1 mile to the southwest of Minot, Ward County, North Dakota. It is bounded to the south and west by U.S. Highway 52 and to the north by Fourth Avenue. The landfill is in two ravines bordered by foothills to the south. Run-off from the area flows in a north-northeast direction toward the Souris River.

From about 1945 to 1971, the landfill was privately owned and operated. According to the former operator, the landfill received refuse from several nearby industries during 1961-70. Included were numerous drums from an oil company, spent battery casings from a recycling company, and calcium carbide and associated lime sludge from an acetylene production facility.

Both the North Dakota State Department of Health (NDSDH) and EPA have investigated the old Minot Landfill. In 1985, NDSDH identified several organic and inorganic chemicals in standing surface water at the landfill. Minot (population 33,000) draws some of its drinking water from the Souris River 1-2 miles downstream of the landfill. NDSDH found that gas generated from decomposition of buried landfill material contained 20 percent methane, creating the threat of fire and explosion. A warehouse is about 150 feet away. Gas bubbles were also observed in standing water on the site, and a "foul sewer smell" was noted.

EPA analysis of samples collected in June 1986 identified benzoic acid, toluene, benzene, ethylbenzene, xylenes, 2-butanone, bromomethane, and 1,2-dichloroethylene in surface water at the downstream boundary of the landfill, particularly in an effluent ditch that carries run-off and leachate from the landfill to the Souris River less than 1 mile away. Two monitoring wells downgradient of the burial cells contained significant concentrations of trans-1,2-dichloroethylene, trichloroethane, benzene, toluene, manganese, barium, and nickel. Minot draws some of its drinking water from wells within 3 miles of the site.

The site is not completely fenced, making it possible for people and animals to come into direct contact with hazardous substances.

Status (March 31, 1989): EPA is considering various alternatives for the 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.