

NPL Site Narrative for National Southwire Aluminum Co.

NATIONAL SOUTHWIRE ALUMINUM CO. Hawesville, Kentucky

National Southwire Aluminum (NSA) Co., a division of Southwire of Carrollton, Georgia, began aluminum reduction operations in 1969 on a 1,100-acre site at the intersection of Kentucky Highways 271 and 334 in a rural section of Hancock County near Hawesville, Kentucky. Two clay-lined ponds, each covering 5 to 7 acres, were constructed for disposal of spent pot linings from the aluminum reduction process (North Pond) and calcium fluoride slurry from the air quality control system (North and South Ponds). NSA closed the North Pond and covered it with a synthetic cap and a layer of soil after the Kentucky Division of Waste Management conducted a preliminary assessment in 1986. Currently, the pond is densely vegetated. The South Pond has been filled to capacity, and its use ceased in 1989. A third, synthetically-lined pond, designated as the New Pond, is now used for disposal of the calcium fluoride slurry.

In 1979, NSA determined that leaching was occurring beneath the North Pond. Cyanide, which is produced in the aluminum reduction process and which is present in the potliners, and fluoride were found in ground water in the area of the disposal ponds. In 1985, NSA found cyanide in one of its three production wells. At that time, the wells were providing drinking water to more than 1,000 employees; the wells were subsequently taken out of service. Other wells that draw from the Ohio River alluvial aquifer within 4 miles of NSA currently serve approximately 16,000 people.

In November 1989, EPA detected significant concentrations of cyanide, arsenic, lead, and nickel in on-site ground water and sediments in the plant's effluent ditch, which flows along the west border of the plant, alongside the disposal ponds, and into the Ohio River.

NSA currently operates under a permit under the National Pollutant Discharge Elimination System. Since 1987, EPA has cited NSA twice for exceeding permit limits: in August 1987 for exceeding total residual chlorine and in November 1990 for exceeding total recoverable zinc in storm water.

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) (<http://www.atsdr.cdc.gov/toxfaqs/index.asp>) or by telephone at 1-888-42-ATSDR or 1-888-422-8737.