

NPL Site Narrative for Northwestern States Portland Cement Co.

NORTHWESTERN STATES PORTLAND CEMENT CO. Mason City, Iowa

Conditions at proposal (June 24, 1988): The Northwestern States Portland Cement Co. (NWSPC) Site covers 150 acres in Mason City, Cerro Gordo County, Iowa. In 1950, NWSPC ceased limestone mining operations and abandoned the quarry west of the plant. In about 1969, NWSPC began using the West Quarry for disposal of cement kiln dust, continuing until April 1985. Over the years, the dumping has reduced the area and volume of the West Quarry. During this same time, the water level has risen approximately 2 feet per year, filling in the quarry so that it now holds approximately 420 million gallons of water.

The waste kiln dust contains chromium and is very caustic (pH 12.4), according to tests conducted by the Iowa Department of Water, Air, and Waste Management (IDWAWM) in October 1979 and August 1983. Additional sampling by a consultant to NWSPC in September 1983 was consistent with earlier data.

Mason City municipal wells are within 3 miles of the site and serve a population of about 30,000. The wells are drilled into the Jordan Aquifer but are open to overlying formations. The Devonian Aquifer, the shallowest dependable source of water for many county residents, is one of the overlying formations. Waste kiln dust has been deposited into this formation.

Calmus Creek, which borders the site downstream, shows high pH levels, according to tests conducted by a consultant to the company in 1985. The creek is used for recreational activities.

On April 2, 1985, the State issued an Administrative Order under a State waste water law requiring the company to cease discharge to Calmus Creek and conduct a study to determine the impact of the quarry on ground water. The company submitted a report to the State dated August 12, 1985. The discharge to Calmus Creek has been discontinued, and the ground water study is continuing.

Status (August 30, 1990): In March 1990, NWSPC, under a State order, completed a remedial investigation/feasibility study to determine the type and extent of contamination at the site and identify alternatives for remedial action. A Record of Decision selecting the remedial alternative was signed on June 26, 1990.

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