

BMI – Textron
1211 Silver Beach Road
Lake Park, Florida
County: Palm Beach
District: Southeast
Site Lead: EPA
Placed on National Priorities List: August 30, 1990
Delisted: November 18, 2002
ERIC ID # 3855
HWC # 083

Site Description and History

The BMI – Textron site is located near the edge of an industrial area of Lake Park, Florida in Section 20, Township 42S, Range 43E at 26° 47' 38.4050" N, 80° 04' 24.8630" W. The nearest residential community is across a roadway south of the site. The facility consists of eight small buildings on approximately 3.5 acres of land. The property is nearly completely covered with buildings and pavement. The groundwater table is approximately 15 to 20 feet below land surface and the flow considered relatively slow to the Northeast.

Basic Microelectronics, Inc. (BMI) constructed the Lake Park facility and began operations in October 1969. In 1981, Textron acquired BMI and continued operations. The facility produced chrome-backed glass plates for manufacturing electronic components. Cyanide was used to etch the cut and polished glass before chromium was deposited on the surface. The chemicals used in the process included arsenic, cerium oxide, ceric ammonium nitrate, chromium, acetone, and perhaps fluoride. A Reverse-Osmosis water purification plant was used to treat some of the wastewater. The remaining wastewater was fed through settling basins and disposed in one of three percolation ponds. Six drainfields and two septic tanks were used for the disposal of sanitary wastewater from the various buildings. In 1985, the facility closed after the discharge permit was violated and a soil and groundwater assessment indicated contamination of one of the percolation ponds. The property is currently used by several small businesses.

Threat

Soil and groundwater analyses indicated arsenic, sodium, cyanide, and fluoride contamination. A removal action and subsequent groundwater monitoring has occurred at this site. The current test results indicate that this site does not pose a threat to the population via soil or groundwater. The site was delisted in November 2002.

Response Strategy and Status

Several site investigations and remedial actions were conducted before the formal Remedial Investigation/Feasibility Study (RI/FS). In late 1984, a soil assessment was conducted on one of the percolation ponds in response to a permit violation. The Florida Department of Environmental Regulation (FDER, now DEP) signed a Consent Order with Textron to excavate and dispose of the contaminated soil. 680 cubic yards of cyanide-contaminated soil were transported to a hazardous waste disposal facility in Emelle, Alabama in December 1984. When the facility ceased operations at the end of 1985, a second, more complete site assessment was

conducted. On the basis of the results, the DEP requested that the site enter a long-term monitoring phase.

The third assessment was conducted in March and April 1987, by the NUS Corporation for ranking the site on the National Priorities List. This assessment resulted in a second Consent Order with FDER to develop an Interim Remedial Action Plan (IRAP) and a Risk Assessment (RA) to address the soil contamination at one of the other percolation ponds. By February 1990, the IRAP, RA and a Field Work Plan were approved. In April 1990, 206 cubic yards of soil around the second percolation pond were excavated and disposed at the Emelle, Alabama hazardous waste facility. Long-term monitoring continued. In October 1991, a hydropunch assessment was conducted to delineate the source area of fluoride contamination near one of the buildings. Excessively high concentrations were not discovered.

In June 1992, Textron, Inc. entered into an Administrative Order of Consent (AOC) with EPA to perform a Remedial Investigation/Feasibility Study (RI/FS). The formal RI fieldwork was conducted between February and July 1993. A preliminary Site Characterization Report was submitted in May 1993, and the final, approved, RI Report was submitted in October 1993. The RI results indicated that soil contamination was limited and of little threat. The groundwater results indicated limited contamination by arsenic, cyanide, fluoride, and sodium. Confirmation samples utilizing low turbidity sampling techniques indicated that arsenic concentrations were below the state Maximum Contaminant Level. All contaminants are within site boundaries.

The EPA submitted the Baseline Risk Assessment (BRA) in July 1993. This document has been approved. The BRA lists cyanide, arsenic, fluoride, and sodium as the Contaminants of Concern (COCs) for this site.

Textron's consultant completed the Feasibility Study (FS) in March 1994. The DEP was concerned that the time to achieve cleanup goals under Alternative #2 (Institutional Controls and Monitoring) may be much higher than predicted. The EPA submitted a Proposed Plan with the FS that supported Alternative #2.

EPA signed a Record of Decision (ROD), with a concurrence letter by DEP on November 2, 1994. The ROD states that Alternative #2 is the appropriate action at the site. This Alternative calls for: monitoring of the natural attenuation process; restricting the use of the property; and a yearly evaluation of the remedy effectiveness.

Results from the first year of sampling data indicated there had been natural attenuation of site contaminants. It was determined that, since the contaminant levels were decreasing, sampling of specific wells could be conducted semi-annually. Three replacement monitor wells were installed in June 1996.

The January 1998 and 1999 sampling results indicated that one monitor well contained cyanide concentrations slightly above the State MCL. Nineteen monitor wells were properly abandoned in October 1998; these wells were not required for natural attenuation monitoring.

During two quarters of monitoring in 2000, groundwater sampling data from the one remaining contaminated monitor well indicated that all contaminants were below all State MCLs. As a result, the EPA posted a delistment notification in August 2002. DEP concurred with delistment due to the absence of groundwater contamination. The site was delisted by EPA in November 2002.