

Circuitron Corporation

New York

EPA ID#: NYD981184229

EPA REGION 2

Congressional District(s): 03

Suffolk
Farmingdale

NPL LISTING HISTORY

Proposed Date: 6/24/1988

Final Date: 3/31/1989

Site Description

Circuitron Corporation manufactured circuit boards on this 1-acre site from 1961 to 1986. Circuitron Corporation was a subsidiary of FEE Industries, which ADI Electronics, Inc. bought in 1984. The property, which had been leased by Circuitron Corporation, was owned by 82 Milbar Boulevard, Inc. from the time of Circuitron Corporation's tenancy until March of 2007. In March 2007, Suffolk County brought about the transfer of ownership of the property through a public auction because of 82 Milbar Boulevard, Inc.'s failure to pay real estate taxes. The circuit board process at the facility included drilling, screening, plating, and scrubbing processes, all of which generated chemical wastes. Wastes were reportedly placed in aboveground and underground tanks and storm drains. Thousands of gallons of plating wastes were discharged to an underground leaching pool that was licensed under the State Pollutant Discharge Elimination System (SPDES) and to an unauthorized leaching pool beneath the floor of the plating room. In 1986, the company vacated the facility. In 1987, EPA found potentially explosive conditions at the site. Over 100 drums, most unmarked, were left throughout the building. Incompatible and reactive wastes were not segregated. Three aboveground storage tanks located behind the building and six concrete holding tanks containing unknown materials beneath the floor were also identified. The site is in a densely populated industrial and commercial area of Long Island. Approximately fifteen municipal wells serving local residents are located within three miles of the site and serve over 215,000 people. The nearest well is located within 1,300 feet of the site and is in the path of the groundwater flow. A shallow well, which could be used for drinking water, has been closed since 1978 due to contamination.

Site Responsibility: This site is being addressed through Federal actions.

Threat and Contaminants

Circuit board operations at the site caused contamination of groundwater with heavy metals and volatile organic compounds (VOCs). Exposure to contaminated groundwater through direct contact, inhalation or ingestion may pose a health threat. The East Farmingdale Water District has indicated that residents in the vicinity of the site may maintain private wells for irrigation purposes, but not as a source for drinking water. These residents obtain their drinking water from the Water District; this water supply is routinely tested to ensure compliance with state and federal drinking water standards.

Cleanup Approach

This site is being addressed in three stages: an emergency action and two long-term remedial phases, which focus on remediation of contaminated groundwater and cleanup of the contaminated soils, sediments and building.

Response Action Status

Emergency Actions: In 1987, EPA initiated an emergency removal of some of the more than 100 chemical containers and storage tanks on site. In 1988, EPA sampled and removed approximately 20 drums and 3 aboveground tanks, and the contents of 7 underground storage tanks, 2 below surface treatment basins, and several leaching basins still on-site. The action involved consolidating the various waste streams, removing the tanks located at the rear of the property, and removing contaminated debris inside the building. In total, 120 cubic yards of contaminated soil and debris, 56 drums of hazardous liquids, and an additional 1,400 gallons of tanked hazardous liquids were removed and properly disposed of off-site.

Soil, Sediments, and Building Demolition: A comprehensive investigation of the site was completed in early 1991. The EPA selected a remedy, documented in the March 1991 Record of Decision (ROD), to address contamination in the soil

and sediments. The remedy included excavating the contaminated sediments from the leaching pools, cesspools, and storm drains and treating and disposing of them off site; VOCs in soils were to be treated by in-place soil vapor extraction (SVE). The remedial design was initiated in the summer of 1991 and completed in September 1994. During the remedial design activities, it was established that the on-site building was not structurally sound and that the building should be demolished. On-site remediation activities, which began in the summer of 1995, consisted of the removal of on-site residual drums, removal of the asbestos present in the building and clearing all debris from the site. This was followed by performing an extensive geoprobe study to further delineate the on-site volatile and semivolatile organic compounds, as well as the metal contamination. The demolition and offsite disposal of the onsite building was completed in August 1996. This was followed by excavation and off-site disposal of contaminated underground structures and sediments and soils within and around the structures. About 50 tons of contaminated sediments and 1200 tons of contaminated soils were removed in December 1996.

Groundwater: A separate investigation, designated as a second operable unit, was initiated in January 1992 to more fully define the nature and extent of the contamination in the groundwater. The investigation was completed in the summer of 1994 and a ROD was signed in September 1994, which included: the extraction of the contaminated groundwater, treatment via precipitation and air stripping, and the reinjection of the treated groundwater. Remedial action funding for this project was received in September 1997. In March and November of 1998, additional groundwater investigations were conducted. The purpose of the additional groundwater investigations was to determine final placement of extraction and monitoring wells, refine the design for the groundwater pumping and treatment system, and obtain a current assessment of the concentrations of VOCs present in the groundwater near the Site. Construction of the groundwater treatment system was initiated in September 1999 and completed in September 2000. During construction activities in the northeast portion of the site, EPA uncovered 7 drywells approximately 10 feet in diameter and 15 feet deep. Contaminated soils and sediments were removed from the 7 drywells, totaling approximately 340 tons. This amount includes the removal of 2 of the drywell structures that were in the pathway of the groundwater reinjection trench. All materials were disposed of as hazardous waste at a RCRA Subtitle C Landfill. The groundwater extraction and treatment facility treated contaminated groundwater and discharged the treated effluent on-site as part of EPA's long-term response actions at the site.

To facilitate cleanup of the groundwater, EPA is conducting a source removal strategy in the southwest corner of the site where moderate levels of VOCs are detected in the groundwater. In November 2005 and June 2006, EPA conducted soil and groundwater sampling at the site to fully delineate the horizontal and vertical extent of the contaminated area in order to design the remedy needed to address the remaining source area. EPA has installed a single integrated groundwater circulating well with an in-well vapor stripping and SVE (GCW/IVS/SVE) system to address the contaminated subsurface soils and groundwater located in the southwest corner of the Site. The purpose of the pilot GCW/IVS/SVE system is to physically separate the contaminants from the soil and the groundwater in vapor form. This process occurs below the ground surface. Contaminated vapors collected from the soil and groundwater will be drawn off and treated above ground through carbon adsorption. Construction of the GCW/IVS/SVE system was started in July 2007 and completed in February 2008. EPA expects to begin operation of the pilot GCW/IVS/SVE system in March 2008 and to operate the system for approximately a year in order to meet ROD soil cleanup goals. The groundwater stripping facility was shutdown in August 2007 so it would not interfere with the GCW/IVS/SVE system by influencing the groundwater flow direction.

Cleanup Progress

The emergency actions taken to remove the chemical containers, drums and storage tanks of hazardous materials have resulted in the removal and off-site disposal of 120 cubic yards of contaminated soil and debris, 56 drums of hazardous liquids, and an additional 1,400 gallons of tanked hazardous liquids. This eliminated the potentially explosive conditions and greatly reduced the potential for exposure to contamination at the Circuitron Corporation site.

Additionally, about 50 tons of contaminated sediments and 1200 tons of contaminated soils were removed from the site in December 1996. The clean up and disposal of the site sediments has further reduced the potential for exposure to contamination at the site and minimized the possibility of further cross media contamination of groundwater.

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A five-year review of the site was conducted in 2005 to ensure that the implemented remedies are protective of public health and the environment. Based on this review, it was concluded that treatment of the groundwater at this site needs

to be continued, and that currently there is no human or environmental exposure to contaminated groundwater and soil. The next five-year review for this site is required by September 2010, five years from the date of the last review.

(Cleanup Yet To Be Performed)

The cleanup goals cited in the ROD have not been met for the groundwater or for the soils located in the southwest corner of the Site. EPA is addressing the contaminated subsurface soils and groundwater through operation of the GCW/IVS/SVE system, which is expected to begin in March 2008. EPA expects to operate the system for approximately a year in order to achieve ROD soil cleanup levels and to reduce the volume of contaminants in the soil to levels that will no longer adversely impact the groundwater.

Site Repositories

Farmingdale Public Library, Main and Conklin Street, Farmingdale, NY 11735

USEPA Region 2: Superfunds Records Center, 290 Broadway, 18th Floor, New York, NY 10007-1866