

# NPL Site Narrative for Aircraft Components (D & L Sales)

## AIRCRAFT COMPONENTS (D & L SALES)

### Benton Harbor, Michigan

**Conditions at Proposal (October 1995):** The Aircraft Components site consists of 17 acres of land in Benton Harbor, Michigan, bounded by the Paw Paw River, North Shore Drive, and residential property. The main building on the site consists of a combination warehouse/office building connected to a warehouse. Outbuildings include a large metal-walled Quonset hut and a small Quonset hut. The buildings have been used for the past 40-50 years for the storage of radioluminous aircraft gauges containing radium as part of a mail-order distribution service known as Aircraft Components Inc.

After World War II the US Army sold aircraft components parts, including radioactive radioluminescent aircraft dials, to Aircraft Components of Benton Harbor. Aircraft Components operated a mail order catalogue business selling Army surplus. The estate of the owners of Aircraft Components sold the property in the early 1990s to D&L Sales, who were interested in the warehouse building but not the Army surplus. D&L sold the aircraft parts to H&K Sales of Belding, Michigan, an aircraft parts dealer. H&K Sales removed the bulk of the radioactive parts and sent them to Belding, Michigan. However, numerous aircraft cockpit gauges with dials, pointers, and scales labeled with radioluminescent paint were found throughout the site, including some gauges partially buried outside of the on-site buildings. In addition to the remaining inventory of aircraft gauges (roughly estimated at several thousand), the warehouse currently contains paper products and Christmas items in storage for shipment as part of the business managed by D&L Sales. Michigan Department of Public Health (MDPH) staff are working with the owners to control movement of merchandise on or off site to ensure that the items are not contaminated. No individuals routinely work at this site.

A preliminary radiation survey was conducted by the MDPH Division of Radiological Health on September 26, 1994. A second supplemental radiation survey was conducted on October 20, 1994 by division staff with the assistance of US EPA Region 5. Gamma radiation levels measured in the office building, warehouse, and Quonset huts ranged from background levels to 5 milliroentgens per hour. Elevated radiation readings of 50 microroentgens per hour were measured outside of the basement windows of the warehouse section. Both fixed and removable contamination exceeded applicable State regulatory limits. Beta/gamma contamination levels ranged from about 100 counts per minute to about 170,000 counts per minute. Ground contamination, after the aircraft gauges were relocated, was measured to be 4,000 to 13,000 counts per minute beta/gamma. Investigations show that radioactive contamination has migrated from the Benton Harbor warehouse to the land around the warehouse, including the Paw Paw River, and possibly to surrounding wetlands.

A preliminary health physics analysis of currently available data relating to the radioluminous gauges indicates that the likely exposure to individuals includes external exposure to gamma rays, internal exposure due to inhalation of radon gas, and potential internal exposure due to inhalation and/or ingestion of contaminated material in the form of dust or other fine particles. A Public Health Advisory was issued by the Agency for Toxic Substance and Disease Registry (ATSDR) of the US Public Health Service on June 29, 1995. Because some radiological contaminants are easily removed from surfaces, ATSDR believes

that this site poses a health hazard to on-site employees, future remediation workers, nearby residents, and any intruders that may enter the on-site structures. Evidence of burning, vandalism, and trespassing suggest that past exposure to radium and radon could have occurred.

**Status (June 1996):** In February 1996, EPA and the MDPH conducted two site inspections to characterize waste volume, estimate removal costs, and develop a risk assessment. EPA is currently developing and Engineering Evaluation/Cost Analysis. A public meeting to discuss removal alternatives is scheduled for late May or early June 1996.

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.