

NPL Site Narrative for Abex Corp.

ABEX CORP. Portsmouth, Virginia

Conditions at proposal (June 24, 1988): Abex Corp. formerly operated a brass and bronze foundry on a 2-acre site in a residential area of Portsmouth, Virginia. During 1928-78, Abex produced parts such as brake shoes and ball bearings for railroad cars. EPA estimates that lead was released to the air at the rate of 10 pounds per day from a 1-acre process area and that 3,500 cubic yards of lead-laden furnace sands were dumped into an adjoining 1-acre area. The present owner of the former process area is Holland Investment & Manufacturing Co. of Portsmouth; Abex still owns most of the landfill area.

In 1984, EPA identified elevated lead levels in soil in the fill area. EPA sampling on April 2, 1986 revealed high levels, up to 13,000 parts per million (ppm), of lead in residential lots next to the fill area. Abex has found significant soil contamination around both the landfill and old process areas.

EPA collected wipe samples on home surfaces around the site on July 1-2, 1986. The results indicated that breathing-zone air contained lead, copper, and tin. Over 10,000 people live and work within 1 mile of the site. A number of residents live either on or immediately adjacent to the lead-contaminated soils.

EPA and Abex signed a CERCLA Emergency Consent Order on August 11, 1986. Abex was required to reduce human exposure to lead to levels that do not constitute an imminent threat to health. Abex graded the site; surrounded it with cyclone fencing topped with barbed wire; covered much of the old landfill area with asphalt; and excavated some areas adjacent to the landfill, filled them in, and revegetated to prevent exposure of residents to lead-contaminated soil.

According to the U.S. Centers for Disease Control, frequent contact with 500-1,000 ppm of lead in soil and dust appears to be associated with elevated blood lead levels in children.

Status (August 30, 1990): On October 10, 1989, EPA and Abex signed a Consent Order under which Abex will conduct a remedial investigation/feasibility study (RI/FS) to determine the type and extent of contamination at the site and identify alternatives for remedial action. EPA is reviewing Abex's final RI/FS workplan.

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.