

NPL Site Narrative for Materials Technology Laboratory (USARMY)

MATERIALS TECHNOLOGY LABORATORY (USARMY) Watertown, Massachusetts

The U.S. Army Materials Technology Laboratory (MTL), commonly known as the Watertown Arsenal, occupies 47.5 acres on Arsenal Street in Watertown, Massachusetts. MTL is located on the north bank of the Charles River and encompasses 36.5 acres approximately 5 miles west of Boston. Eleven acres of inactive MTL land situated between North Beacon Street and the Charles River was leased to the Commonwealth of Massachusetts in 1920 and currently contains the North Beacon Street Park and the Watertown Yacht Club.

The facility was originally established as the Watertown Arsenal in 1816. The facility continued to expand and occupied 131 acres and employed 10,000 people at the end of World War II. The site was used for small arms maintenance and ordnance supplies; ammunition and pyrotechnics production; paint, lubricant, and cartridge testing and experimentation; manufacture of guns and cartridges; and development of advanced metallurgical processes used in the casting, welding, and machining of artillery pieces. A research nuclear reactor was used for molecular and atomic structure research activities from 1960 to 1970. Although the reactor was deactivated in 1970, it is currently being decommissioned under the jurisdiction of the Nuclear Regulatory Commission. In 1968, approximately 55 acres were sold to the Town of Watertown. Of the 47.5 acres retained by the Army, 36.5 acres became the Army Materials and Mechanical Research Center (AMMRC). In 1985, AMMRC became MTL. The current mission of MTL includes testing material; developing weapons, ammunition, and lightweight armor; and manufacturing testing technology.

In October 1988, Congress recommended the closure of the facility. The U.S. Army Toxic and Hazardous Materials Agency (THAMA) had already initiated the first stage of the closure plan, the preliminary assessment/site inspection, which was conducted in 1987. The Army also conducted a soil, sediment, and ground water sampling program in 1988, from which a remedial investigation (RI) report was produced. The data obtained from this sampling could not be verified or validated by the Army. Subsequently, the Army completed a Draft Phase 1 Remedial Investigation Report in April 1991 and a Phase 2 report in October 1992.

Sampling during these investigations indicated contamination of ground water, soil, surface water, and sediments at MTL. Contaminants detected above background concentrations at the site include volatile and semi-volatile organic compounds, PCBs, pesticides, inorganic elements, and radioactive substances. PCBs were detected on the property on the surface of electrical transformers and in the surrounding soil. Samples collected from onsite storm drains indicate the presence of several organic compounds and inorganic contaminants related to site activities. However, there are other potential sources of contamination from nearby industrial activity.

The only known drinking water well within 4 miles of the site not separated by the Northern Boundary Fault, is a private well 2.5 miles northwest of the property. Municipal drinking water within 4 miles of the site is

supplied by surface water sources located to the west of MTL, and are unaffected by the site. The Charles River is used for recreational boating, swimming, and fishing.

The active portion of MTL is completely fenced and public access is restricted 24-hours by a guarded gate. Eight people occupy housing located on the property. Approximately 600 people are currently employed at MTL.

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.