NPL Site Narrative for Natick Laboratory Army Research, Development, and Engineering Center

NATICK LABORATORY ARMY RESEARCH, DEVELOPMENT, AND ENGINEERING CENTER Natick, Massachusetts

The U.S. Army Research, Development and Engineering Center, commonly known as the Natick Laboratory, is located on Kansas Street in Natick, Middlesex County, Massachusetts. The Natick Laboratory occupies a peninsula on the eastern shore of Lake Cochituate and is bordered to the north by a residential zone. The Natick Laboratory facility is located on 74 acres that was purchased by the Army in 1949 from the Metropolitan District Commission. The property was primarily used as a forested recreational area but also included a gravel pit in the section known as the Building T-25 Area. The Army completed the construction of the Natick Laboratory in 1954; since then, several industrial, laboratory, and storage activities have taken place on the grounds for research and development in food science, aero-mechanical, clothing, material, and equipment engineering.

In its operations, the Army used various substances including tetrachloroethene, trichloroethene, carbon disulfide, benzene, chloroform, tetraethyllead, acetone and other volatile organic compounds (VOCs), "standard laboratory chemicals," mineral spirits/turpentine, paints, inks, lubricants, gasoline, several pesticides, and metal dusts.

Two sources of hazardous substances have been identified onsite. The Building T-25 Area was identified as potentially contaminated around 1989, when personnel at the facility noticed a sheen on the runoff water generated during rain storms. In 1989, construction work was halted in the Gymnasium Area when construction workers noticed a benzene-like odor in soil from a boring that was drilled for construction of a gymnasium.

In 1989, the Army conducted soil gas surveys in the Building T-25 and Gymnasium Areas and detected several VOCs. Soil, ground water, and surface water samples contained elevated concentrations of 1,2-dichloroethene, benzene, carbon disulfide, bis (2-ethylhexyl) phthalate, chlorobenzene, ethylbenzene, xylenes, Freon 113, naphthalene, 1,2,4-trichlorobenzene, arsenic, barium, copper, chromium, lead, zinc, calcium, and sodium.

Other potential sources of chlorinated organic compounds have been identified near Natick Laboratory. Petroleum, organic compounds, and chlorinated solvents have been released into soil and ground water at a property previously occupied by a laundromat, approximately 3,600 feet southeast of the laboratory well field across Lake Cochituate. An "old laundromat" is also reported to exist approximately 2,670 feet east-southeast of the Springvale well field. Certain establishments located on Routes 9, 27, and 30, and some automotive garages in the area may also be sources of VOC contamination in the ground water near the Evergreen and Springvale municipal well fields.

Approximately 37,000 people obtain drinking water from wells within 4 miles of the facility.

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) or by telephone at 1-888-42-ATSDR or 1-888-422-8737.