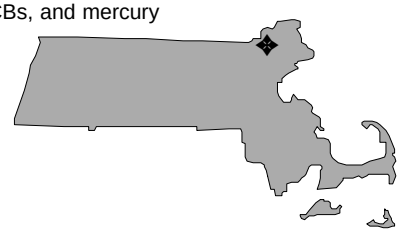
Size: 826 acres
Mission: Support Electronic System Center
HRS Score: 50.00; placed on NPL in May 1994
IAG Status: None
Contaminants: VOCs, chlorinated solvents, gasoline, jet fuel, tetraethyl lead, PCBs, and mercury
Media Affected: Groundwater, surface water, sediment, and soil
Funding to Date: $28.9 million
Estimated Cost to Completion (Completion Year): $18.2 million (FY2020)
Final Remedy in Place or Response Complete Date for All Sites: FY2000



Bedford, Massachusetts

Restoration Background

Historical operations at Hanscom Air Force Base involved generation, use, and disposal of numerous hazardous substances, such as chlorinated solvents, fuel, aromatic solvents, tetraethyl lead, and polychlorinated biphenyls (PCBs). Possible sources of contamination include a former industrial wastewater treatment system, a former filter-bed/landfill area, a jet fuel residue and tank sludge area, two landfills, three former fire training areas, a paint waste disposal area, a mercury spill area, the former aviation fuel handling and storage facilities, underground storage tanks (USTs), and various fuel spill areas.

Environmental studies identified a total of 22 sites. All required actions have been completed, and no further response is planned, for 13 of these sites. Decision documents for no further response are being prepared for two additional sites. Remedial Investigations and Feasibility Studies (RIs/FSs) are under way at the remaining seven sites, and Interim Remedial Actions have been completed or are under way at six of the seven.

In FY88, the final Remedial Action (RA) was completed at the closed municipal waste landfill, and Interim Actions were completed at three high-risk sites in Operable Unit (OU) 1. Buried drums and contaminated soil also were removed. In FY89, the final RA was completed for the mercury release site.

In FY90, Interim Actions included removing abandoned tanks and petroleum-contaminated soil at UST sites. In FY91, the installation began operating the OU1 groundwater collection and treatment system to remove VOCs from groundwater and completed an Interim Action at the Army and Air Force Exchange Service (AAFES) service station UST site, including removal of 2,700 tons of contaminated soil.

In FY94, the installation removed more than 1,300 tons of contaminated soil from a former UST site. In FY95, the installation began an Interim Action involving dual-phase groundwater extraction and soil vapor extraction system at the former aviation fuel handling and storage area for remediation of petroleum releases. The installation's technical review committee was converted to a Restoration Advisory Board (RAB).

In FY96, the installation entered a partnership with EPA and Tufts University to support research and development while filling data gaps in RIs. In FY97, the installation automated the groundwater recovery and treatment system at OU1 and added two new recovery wells to the collection system. Human Health and Ecological Risk Assessments were completed for the capped municipal waste landfill, and the Massachusetts Contingency Plan (MCP) documentation was filed to establish natural attenuation as the final remedy for the AAFES service station UST site.

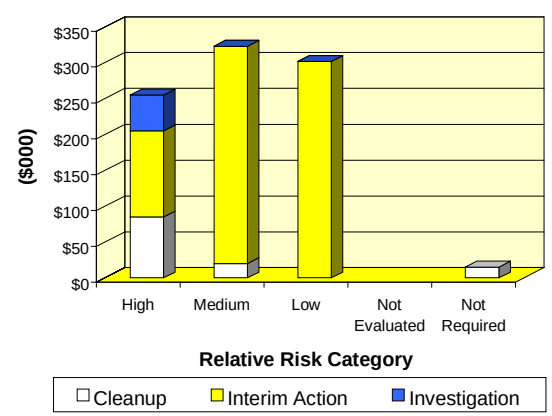
FY98 Restoration Progress

The installation completed Site Inspections (SIs) at two UST sites, an RI at the former filter-bed/landfill site, and groundwater monitoring at OU1 and the AAFES service station site. FS and Record of Decision (ROD) processes for OU1 and OU3 and operation of the groundwater recovery and treatment system at Site ST21 continued.

Tufts University completed an environmental technology initiative at OU1, which EPA has publicized as a success story. The installation hosted an Air Force Technology Transfer Project to demonstrate vacuum-enhanced recovery of chlorinated hydrocarbons from groundwater at the former fire training site in OU1. The success of this project resulted in the scheduling of an additional 6-month demonstration for FY99. Three RAB meetings were held in FY98.

Technical problems delayed the Human Health and Ecological Risk Assessments for OUs 1 and 3 and the process to establish the final remedy for the base motor pool UST site.

Plan of Action

- Complete Human Health and Ecological Risk Assessments for OU1 and OU3 and the RI at the former aviation fuel handling and storage site in FY99
- Complete MCP process to establish natural attenuation as final remedy for the base motor pool UST site in FY99
- Complete No Further Action decision documents for two UST sites in FY99
- Host Air Force Technology Transfer Project to demonstrate vacuum-enhanced recovery of chlorinated hydrocarbons from groundwater at Site FT01 in OU1
- Continue FS and ROD process for OU1 and OU3 in FY99
- Continue operating the groundwater recovery and treatment system for OU1 and the dual-phase recovery and treatment system at the former aviation fuel handling and storage area in FY99
- Continue long-term monitoring at the AAFES service station site and long-term maintenance at the capped municipal waste landfill in FY99

FY99 Funding by Phase and Relative Risk