# Groveland Wells Site Groveland, MA

## U.S. EPA | HAZARDOUS WASTE PROGRAM AT EPA NEW ENGLAND



**THE SUPERFUND PROGRAM** protects human health and the environment by investigating and cleaning up often-abandoned hazardous wastesites and engaging communities throughout the process. Many of these sites are complex and need long-term cleanup actions. Those responsible for contamination are held liable for cleanup costs. EPA strives to return previously contaminated land and groundwater to productive use.

#### INTRODUCTION

The 850-acre Groveland Wells Superfund Site (the "Site") is located near 64 Washington Street, in Groveland, Massachusetts. The Site's responsible party (RP), the former Valley Manufacturing Products Company (VMPC) released cutting oils and chlorinated hazardous solvents from its manufacturing operations. Additional waste leaked from underground storage tanks and disposal systems at the facility. Site releases contaminated the town of Groveland's public drinking water supply. EPA placed the site on the National Priorities List (NPL) in 1982.

#### SITE BACKGROUND

The Site includes a watershed and aquifer supplying two municipal drinking water wells, in addition to several properties with contaminated groundwater and soil. Due to this contamination, Groveland production Wells #1 and #2, the sole source of drinking water for the Town, were shut down in 1979 when the State detected trichloroethylene (TCE) above acceptable limits.

Contamination originated at the former VMPC which manufactured metal parts, screws, and cable connectors from 1963 until 2001. Liquid wastes were disposed of in buried leach fields located on the property. Additional sources of contamination include a leaking underground storage tank containing TCE as well as hazardous materials dumped on the surface of the ground. Hazardous substances released included cutting oils, mineral spirits, TCE, Volatile Organic Chemicals (VOCs) and acid bath wastes.

After shutdown, Town Well # 2 was permanently abandoned due to its proximity to the Merrimack River and the Haverhill Landfill (a separate Superfund Site). Groveland Town Well #1 is currently operational, safe, and routinely tested for hazardous substances. The Town of Groveland developed Well #3 in a different aquifer in the early 1980's.

#### KEY CONTACTS

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### **CLEANUP ACTIONS**

In late 1987 and early 1988, the RP utilized soil vapor extraction (SVE) and a small groundwater treatment system to remove contaminants from soil at the VMPC property, however, these systems were ineffective. EPA subsequently designed and constructed the current, and much larger Groundwater Treatment Facility (GWTF). The facility, built on the Archdiocese of Boston property located at 62 Washington Street, began operation in April of 2000 with EPA overseeing operation until 2011 when the Massachusetts Department of Environmental Protection (MassDEP) assumed operational control. Additional activities undertaken during this period included the removal of abandoned underground storage tanks, a former underground disposal system, and contaminated soil from the site.

In 2010, despite 10 years of treatment, groundwater and soil contamination levels in the source area remained above cleanup goals on the VMPC property. To address this, EPA funded the construction and operation of a thermally-enhanced soil vapor extraction system known as Electrical Resistive Heating (ERH), which operated from August 2010 through February of 2011. Due to the combined effectiveness of ERH and the GWTF iby 2014 the contamination was reduced to such an extent that active groundwater treatment was determined to no longer be necessary, resulting in the shutdown of the GWTF in May 2014.

#### CURRENT STATUS

With the completion of remedial activities MassDEP worked in conjunction with the State Office of Surplus Property to auction off the groundwater treatment equipment in 2020 and 2021. Decommissioning of the GWTF and components of the groundwater treatment system consisted of:



Figure 2: Treatment Plant Cleaning



Figure 3: Former Treatment Shed Demolishion (H: Backfill of slab & footing)



Figure 4: Influent and effluent line cutting and capping



Photo I: Excavation to cut and cap influent lines on the north side Photo J: Influent line cut and capped with concrete Photo K: Ground surface following cutting and capping of influent and effluent lines on east side

# Figure 5: Site Restoration



Photo L: Compaction of subgrade prior to asphalt placement Photo M: Asphalt repair on the north side Photo N: EW-4 and EW-S5 area following placement of straw Photo O: Extraction well area after placement of topsoil and grass seed

The GWTF as of June 2020 is properly cleaned and decommissioned (Figure 6). Now that the building has been properly cleaned, ownership of the former treatment building has been transferred to the Archdiocese of Boston for its use.

Going forward, the Town will continue to sample the drinking water supply wells to ensure that the water meets all protective standards. In addition to well-head sampling conducted by the Town, MassDEP collects quarterly groundwater samples from two "sentinel" groundwater monitoring wells located between VMPC and the municipal well and

samples other groundwater monitoring wells located on the Site on an annual basis. The 2021 groundwater sampling events (conducted in February, April, July, and December 2021) continue to demonstrate that these sentinel wells do not have detectable levels of Site-related contamination and concentrations in groundwater monitoring wells at the Site continue to decrease.

Institutional Controls (ICs) were place on Valley (which is 64 Washington St.), 62 Washington St. (Archdiocese property), and Tax Map 32, Lot 25 (the DPW property) on Washington St., which does not appear to have a street number. ICs are non-engineered instruments, such as deed restrictions, which provide administrative and legal controls to protect the integrity of the cleanup actions; for example, the groundwater monitoring and extraction wells, and reuse of the properties. ICs also prohibit residential, agricultural, or other uses of these properties that may present an unacceptable human health risk, and prohibit extraction of groundwater and subsurface excavation unless EPA and MassDEP approve a workplan or until all protective cleanup levels are achieved.



Figure 6. Interior of the former groundwater treatment building.

#### NEXT STEPS

Now that the treatment system has been decommissioned and the groundwater treatment building has been transferred to the Archdiocese of Boston, this paves the way for the Church to reuse the building and property.

MassDEP and EPA will continue with long term groundwater monitoring and Five Year Reviews of the remedy. More information on the Site can be found at <u>www.epa.gov/superfund/groveland</u>. If you have any questions on the site reach out to Charlotte Gray, the site's Community Involvement Coordinator, at <u>gray.charlotte@epa.gov</u> or 617-918-1243.