

Superfund Redevelopment Initiative

SITE REDEVELOPMENT PROFILE

Re-Solve, Inc. Superfund Site

Dartmouth, Massachusetts



Site Location: North Hixville Road, Dartmouth, Massachusetts 02747

Size: 6 acres

Existing Site Infrastructure: All major types of infrastructure are located on site.

Current Site Uses: A restored wetland and pollinator habitat are located on site. A solar-powered groundwater treatment system is also located on site.

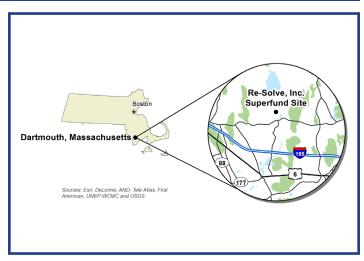
Use Restrictions: Institutional controls on site prohibit well installation, building construction, soil disturbance and residential site use.

Surrounding Population: within 0.5 mile, 40 people; within 2.5 miles, 6,010 people; within 4 miles, 14,804 people.

The Re-Solve, Inc. Superfund site, a former waste chemical reclamation facility, now hosts a state-of-the-art, solar-powered groundwater treatment facility as well as restored wetlands and meadows. It is a national example of innovation in green remediation and ecological reuse at formerly contaminated lands.

The 6-acre site is located along the Copicut River in North Dartmouth, Massachusetts. Between 1956 and 1980, Re-Solve, Inc. handled and disposed of a variety of hazardous materials, including commercial solvents and waste oil. Volatile organic compounds (VOCs) and polychlorinated biphenyls (PCBs) from waste disposal efforts contaminated site soils. In 1980, the company shut down its facility. In 1981, it removed drums and debris and demolished buildings. However, the contents of four waste lagoons remained on site. In 1983, EPA placed the site on the Superfund Program's National Priorities List (NPL).

During site investigations, EPA determined soil, sediment and groundwater to be impacted by



Location of the site in Dartmouth, Massachusetts.

VOCs and PCBs. EPA completed excavation, treatment and backfilling of more than 36,000 cubic yards of impacted soil and sediment in 1994. In 1998, a two-tiered groundwater extraction and treatment system began operating at the site to prevent migration of contaminated groundwater off site.

November 2019

SITE HISTORY AND REDEVELOPMENT TIMELINE

1956 -	Re-Solve, Inc. operated a waste
1980	chemical reclamation facility on site.

- **1980** The company shut down its facility.
- 1981 Re-Solve, Inc. removed drums and debris and demolished buildings on site.
- 1983 EPA placed the site on the NPL and finalized the initial remedy.
- 1987 EPA issued second remedy to address remaining on- and off-site contamination.
- 1988 A monitoring program began monitoring PCB concentrations in area fish populations.
- 1994 EPA and responsible parties restored wetlands on site and completed soil and sediment removal and treatment.
- 1998 Responsible parties installed a groundwater pumping, containment and treatment system.
- 2002 Responsible parties ran a biofilter/2009 phytoremediation pilot field study.
- 2011 EPA and responsible parties installed anaerobic bioreactors on site. They are powered by a solar array.
- 1998 EPA conducts Five-Year Reviews
 Present of the site's remedy to ensure
 it remains protective of human
 health and the environment

"The site is an example of how targeted investments can lead to reversing the carbon footprint of existing infrastructure ... [It is] a model for promoting sustainable practices and energy use."

- Bill Keating, Massachusetts State Congressman

In 1994, EPA and responsible parties restored an acre of wetlands on site as a part of the cleanup. Responsible parties also worked closely with EPA and the U.S. Fish & Wildlife Service to convert 4 acres of the site into a native meadow for ecological reuse, placing bird boxes, brush piles and sand piles for turtles.

With immediate risks under control, EPA and responsible parties worked together on sustainable enhancements for the site's groundwater treatment system. After running a pilot study from 2002 to 2009, two anaerobic bioreactor systems were installed in 2011. These underground biological treatment beds naturally break down chemicals and greatly reduce the volume of waste generated from traditional groundwater treatment. To further enhance green remediation, an array of 644 solar panels provide all of the power needed to run the groundwater treatment system.

Since 1988, a fish monitoring program has evaluated PCB concentrations in area fish populations. The biennial Cornell Pond Fishing Derby enlists the local community in the monitoring effort and reminds the public that a Massachusetts Department of Public Health fish advisory is still in effect.

FOR MORE INFORMATION

Frank Avvisato | (703) 603-8949 avvisato.frank@epa.gov

Joe LeMay | (617) 918-1323 lemay.joe@epa.gov

Site Web Page: www.epa.gov/superfund/resolve



In May 2017, EPA established a task force to restore the Superfund program to its rightful place at the center of the Agency's core mission to protect health and the environment.

epa.gov/superfund/superfund-task-force

November 2019