Celebrating Success: The Re-Solve, Inc. Site Dartmouth, Massachusetts

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Superfund Redevelopment Initiative



"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



Solar arrays provide safe and clean energy. (Source: iStock)

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September 2015 celebration of solar array. (*Source:* EPA)

The Re-Solve, Inc. Superfund site (the Site), the former location of a waste chemical reclamation facility, now hosts a state-ofthe-art, solar-powered groundwater treatment facility as well as restored wetlands and meadows. It serves as a national example for innovative green remediation and ecological reuse projects.

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 1981, Re-Solve, Inc. removed drums and debris, and demolished buildings. However the contents of four waste lagoons remained. In 1983, EPA added the Site to the Superfund Program's National Priorities List (NPL).

During excavation of 15,000 cubic yards of contaminated soil, EPA identified PCB contamination in the groundwater. Groundwater cleanup became a top priority, prompted by the proximity of residences using drinking water wells. In 1998, a two-tier groundwater pump, containment and treatment system began operating at the Site, addressing community concerns.

As part of site cleanup, EPA and Re-Solve Site Group also restored an acre of wetlands at the Site. The company also worked closely with EPA and the U.S. Fish & Wildlife Service (USFWS) to convert 4 acres into a native meadow for ecological reuse, placing bird boxes, brush piles and sand piles for turtles.

With immediate risks under control, EPA and Re-Solve Site Group worked together on sustainable enhancements for the Site's groundwater treatment system. Approved in 2011, two anerobic bio-reactor (ABR) systems are now in place. These underground biological treatment beds naturally break down chemicals. 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 annual 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. The 18th Annual Fishing Derby took place at the Site in October 2015.