

Former Dry Cleaner Redevelopment, Downtown Barre, Vermont



Services / Expertise

Environmental Assessment and Remediation
Brownfields Redevelopment

Market

State and Local Government

Project Location

Barre, Vermont

Date Completed

2014-2015: Phase I & II ESA
2017: Corrective Actions (anticipated)

Project Owner

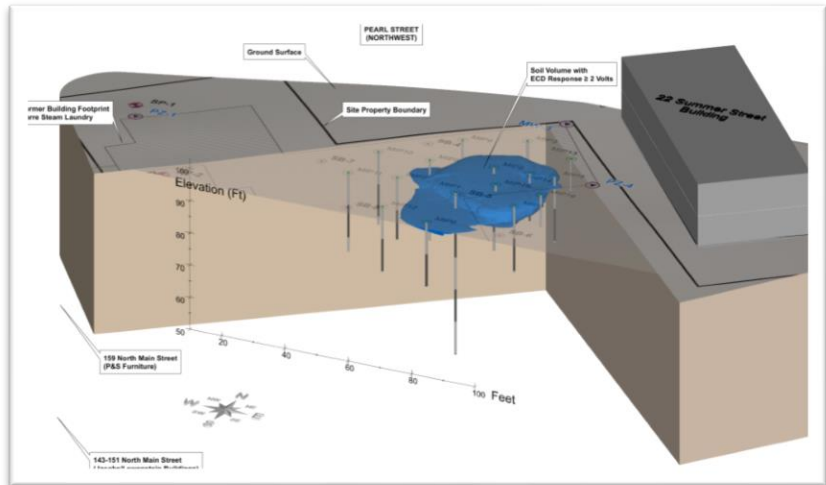
City of Barre, Vermont

Project ID#

2014-021

Project Manager

Steven A. Hubbs



Three-dimensional visualization of the contamination "hot spot" identified by Stone at the Keith Avenue property using the Membrane Interface Probe. This model will be used to plan soil removal.

STONE performed the following services for the City of Barre for a property slated to become part of a multi-use development in downtown Barre City, Vermont:

An ASTM Phase I ESA identified a former dry cleaner on the property in a long-since demolished building. Stone then assisted the City to enter the VT Brownfields Reuse and Environmental Liability Limitation Act (BRELLA) program.

Rapid, Cost-Efficient Phase II ESA was performed to screen for the presence of volatile organic compounds (VOC) before the City acquired ownership. Screening consisted of collecting and analyzing samples of shallow soil gas across the property. The rapid screening program identified chlorinated VOC, primarily tetrachloroethene (PCE). Armed with these results, the City decided to proceed to a more intensive environmental investigation upon entering the BRELLA program.

High-Resolution Site Investigation. In lieu of traditional monitoring wells, Stone utilized direct-push groundwater sampling techniques to directly sample the aquifer at multiple depths, and implemented a sampling program to assess the potential for vapor intrusion in abutting buildings. Direct-push soil sampling and the high-resolution Membrane Interface Probe was then used to rapidly delineate the PCE contaminant "hot spot," as shown in the 3D model above.

Outreach to Abutting Landowners. Stone developed template access agreements and a vapor intrusion fact sheet written in non-technical language for the City to distribute to the abutting property owners.

Next steps include evaluating remedial alternatives and preparation of a Corrective Action Plan. The selected remedial alternative is likely to include "hot spot" removal, capping lightly contaminated soils, a deed restriction, and follow-on monitoring to evaluate if vapor intrusion remains a risk following removal of the "hot spot."