

5,000-GALLON GASOLINE RELEASE PETROLEUM BULK STORAGE FACILITY –VERMONT

R.E.A. provided oversight during the initial response for a 5,000-gallon gasoline release site at a bulk petroleum storage facility in northern Vermont. After alleviating the immediate threat to the environment, **R.E.A.** completed a detailed hydrogeologic site characterization and performed surfactant soil flushing and soil vapor extraction (SVE) pilot studies.



Figure 1. Installation of recovery wells during the initial spill response.

SVE was determined to be the most cost effective remedial option after careful review of several different options. **R.E.A.** installed a 12-point SVE system connected to a treatment trailer equipped with a 3-HP regenerative blower and Falco-100 catalytic oxidizer.



Figure 2. Free-product discovered in groundwater following the spill



Figure 3. Free-product recovery system

Key Features

- Over 1,100 gallons of free-phase gasoline was collected during the initial response activities with another 1,500 gallons collected over the next few months.
- Site characterization indicated that the free-phase plume encompassed approximately 5,400 square feet.
- A 54 % reduction in contaminant concentrations was noted following the first six months of operating the SVE system.
- Free-phase gasoline, which was initially detected at over three feet thick, decreased to non-detectable levels after six months of operating the SVE system.
- Current estimates indicate that site remediation is progressing as plan with remedial goals being achieved within 18 months.

