

Gasoline Contaminated Soil Excavation and ORC Injection – Orwell, VT

Gasoline contamination was discovered during the removal of an UST system at a convenience store in Orwell, VT. Based on an evaluation of several different remedial alternatives **R.E.A.** determined that source removal with the injection of an oxygen release compounds (ORC) was the best remedial alternative for the Site.

During soil excavation, an abandoned UST was discovered and **R.E.A.** was able to arrange for State funding to pay for removal of the tank. Over 300 cubic yards of petroleum contaminated soil were removed and transported to a certified facility for thermal destruction. Prior to backfilling, **R.E.A.** personnel added ORC to enhance the natural biodegradation of residual petroleum contamination. Within three months of implementing the corrective action, there was over a 99% reduction in contaminant concentrations in ground water beneath the site.



R.E.A. was then able to assist the property owner through the permitting process to replace the contaminated drinking water supply with a new bedrock supply well. A new well was successfully installed to provide the store with potable drinking water.



Key Services:

- Mitigated the potential for off-site migration by employing source removal and ORC application.
- Eliminated the potential for vapor intrusion in the building by excavating over 300 cubic yards of petroleum contaminated soil;
- ORC application was used successfully to remediate residual dissolved-phase contamination within the shallow overburden formation;
- Over 99% decrease in dissolved-phase contaminant concentrations in ground water within three months following ORC application;
- Provided oversight during installation of a bedrock supply well to replace the existing impacted supply well.

