

## KEROSENE RELEASE IMPACT TO SUPPLY WELL & NEARBY STREAM

**R.E.A.** personnel responded to a kerosene release which occurred beneath a mobile home in northeastern Vermont. During the initial spill response, it was apparent that the on-site drinking water supply well, which consisted of a shallow spring, and the nearby stream had been significantly impacted by kerosene contamination. The initial response included containment of the spill, deployment of adsorbent booms & pads, and a sensitive receptor survey. During the spill response, over 1.5 feet of free product was noted floating on the surface of the spring.

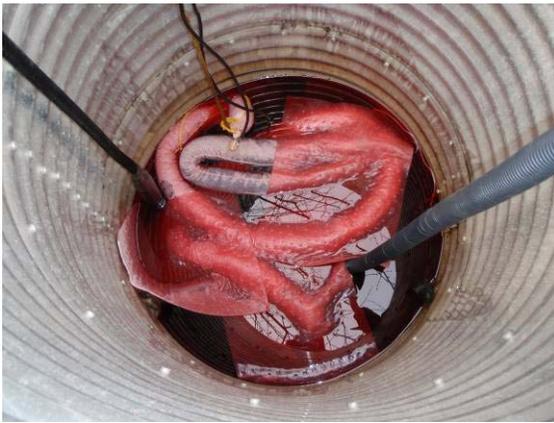


Figure 1. Impacted drinking water supply well.

In addition to using pads and booms to minimize product migration downstream, **R.E.A.** personnel mobilized a vac-trailer and removed approximately 140-gallons of free product, water and well bottom sludge from the spring. After the initial kerosene removal from the spring, a pump & treat system and a spill buster free product recovery system were utilized to contain and remove dissolved-phase and free-phase kerosene from the spring.

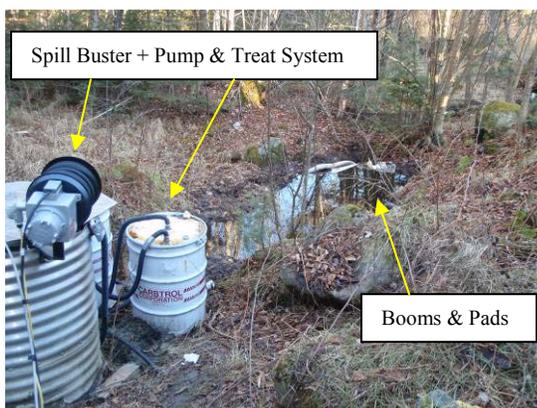


Figure 2. Free product recovery and pump & treat system.

**R.E.A.** also provided oversight during the replacement of the spring with a new bedrock supply well. In addition, piping inside the mobile home was flushed to remove the contaminant impact to the interior plumbing.



Figure 3. New bedrock supply well installed to replace impacted spring

### Key Findings

- Over 50-gallons of free-phase kerosene were collected during the initial response activities using a vac-trailer and adsorbent booms.
- Approximately 20-gallons of kerosene were collected over the next few weeks using a spill buster free product recovery system.
- A new bedrock supply well was installed to replace the impacted spring.
- The indoor plumbing system was flushed to remove residual petroleum contamination from the interior piping prior to connecting the new supply well to the mobile home.
- The nearby stream was continually monitored with adsorbent pads & booms being replaced as needed.
- Free-phase kerosene, which was initially detected at over 1.5 feet thick in the on-site spring, decreased significantly due to the use of a vac-trailer and the spill buster free product recovery system.

