

# Post-Closure Monitoring

Closed Landfill, Newberry County, South Carolina

## PROJECT DESCRIPTION

The site is a landfill that was closed in 1996 and is in post-closure monitoring. Contaminants including fuel constituents, chlorinated solvents, and metals have been identified in groundwater, and methane concentrations at four of six methane monitoring points persist over the lower explosive limit for methane in air (five percent).

## ROGERS & CALLCOTT SERVICES

In accordance with R.61-107.19, Rogers & Callcott monitored groundwater semi-annually using a network of 13 monitoring wells located both on- and off-site, and we collected 1 surface water sample from a nearby creek during each monitoring event. All water samples were analyzed at the Rogers & Callcott laboratory. Methane gas concentrations were also monitored semi-annually at six methane monitoring points and inside two on-site structures.



Immediately upon contract award, Rogers & Callcott completed a new Sampling and Analysis plan for the site, receiving South Carolina Department of Health and Environmental Control approval to eliminate multiple laboratory analyses. This reduction resulted in a savings of more than \$45,000 for the County during the 2-year contract period. Semi-annual reporting was also streamlined to lower ongoing report costs.

Following installation of an active methane gas recovery system, Rogers & Callcott operated, maintained, and monitored the system. Operational and performance parameters of the landfill gas recovery system were monitored monthly and included inspections of system components, routine maintenance, measuring flow, vacuum, pressure and concentrations at multiple system components and extraction wells, and measuring changes in landfill gas concentrations at monitoring wells. The data was logged electronically, adjustments were made to the system's operation as needed, and reports were submitted to the client and agency quarterly.