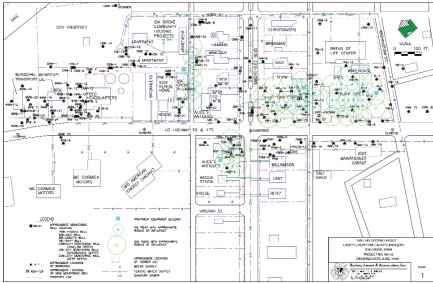


SCOPE OF PROJECT

BARKER LEMAR was contracted by the Iowa Underground Storage Tank program administrator to assess subsurface conditions related to existing and potential contamination of Ida Grove's drinking water wells and other sensitive receptors. **BARKER LEMAR** was also contracted to evaluate applicable remedial technologies to clean up existing contamination as well as prevent further contamination, and to design, install, and maintain the remedial systems recommended.



IMPLEMENTATION

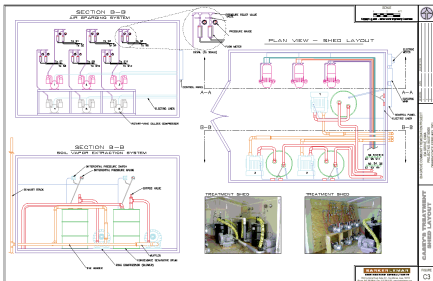
Assessment and system design were completed in February and June 1998 respectively. Remediation included installation of four in-situ air/sparging/soil vapor extraction systems at the three sites. An additional system was installed at a down gradient location to protect against plume migration. Abandonment of city drinking water wells and installation of a free product removal system were also implemented. The remedial systems were deactivated by November 2004. Post-active remediation sampling of the groundwater indicated petroleum hydrocarbon concentrations remained stable, below the site-specific target level designated for the subject sites.



The system and monitoring wells were abandoned and the final report was submitted in April 2007. The subject sites received no further action certificates in June 2007.

SERVICES

Global positioning system (GPS) surveying; risk-based corrective action (RBCA) analysis; free product recovery and reporting; drilling and well installation; remediation system design, installation and operation (groundwater and soil); water supply evaluation; expert witness testimony.



TIMELINE

Project Start Date: August 1998
Project Completed: June 2007