

US EPA ARCHIVE DOCUMENT

## EPA/Shell Oil Pilot-Scale MTBE Adsorption Oxidation Demonstration

Ongoing collaboration between Shell Oil Co. and EPA's Ground Water and Ecosystem Restoration Division has resulted in the pilot-scale evaluation of Fenton-driven regeneration of methyl tert-butyl ether (MTBE)-spent granular activated carbon (GAC). The objectives of the proposed pilot-scale project are to:

- Assess the technical and economic feasibility of chemically regenerating MTBE-spent GAC
- Quantify the percent regeneration
- Develop cost estimates of the treatment process for larger systems
- Develop guidelines for performing the chemical regeneration of GAC in full-scale treatment systems

Development of this technology through demonstration may help reduce annual operating expenses by performing GAC regeneration on-site in the adsorption vessel thus avoiding transportation and handling costs.



MTBE treatment at the Tuller Avenue ground water treatment system