

Research Projects

Processes Affecting the Natural Attenuation of Gasoline in Ground Water -- Galloway Township, New Jersey [Completed]

Gasoline spills from leaking underground storage tanks is the most common mechanism of subsurface point source contamination. Nationwide, leaking underground petroleum storage tanks threaten shallow ground-water supplies and allow gasoline vapors to move into underground structures. A representative regular gasoline spill from a leaking underground storage tank in Galloway, New Jersey, has been the focus of Toxics Program research on regular gasoline. A shallow sand aquifer at the site has been contaminated. Investigators have developed methods to determine the rate at which gasoline degrades to less toxic compounds in the subsurface and to simulate the movement of gasoline vapors in soil using computer models developed specifically for that purpose. These methods are used to evaluate the potential for the natural attenuation and to design remedial strategies for gasoline in the subsurface.

**[Project Bibliography](#)**

56 Publications

[Project Photo Gallery](#)**Related Science Feature Articles**

- USGS Scientists Contribute to the Landmark "[Treatise on Geochemistry](#)"
- [Toxics Program Scientist Selected as 2003 USGS Engineer of the Year](#)
- [How do you Clean Up Gasoline Spills Naturally?](#)
- [Relying on Nature to Clean Up Contaminated Ground Water](#)

More Information

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- [Project Photo Gallery](#)

Project Remediation Related Activities

- [Vapor Extraction Optimization](#)
- [Quantifying Natural Attenuation at the Plume Scale](#)

Related Investigations

- Processes Affecting the Natural Attenuation of Fuel Oxygenates in Ground Water -- [Laurel Bay, South Carolina](#) [Completed]
- Crude Oil Contamination in the Shallow Subsurface -- [Bemidji, Minnesota](#)
- Environmental Impacts Associated with Disposal of Saline Water Produced During Petroleum Production - [Osage-Skiatook Petroleum Environmental Research Project, Oklahoma](#) [Completed]

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