



Case Study: IL Gas Station

Project Summary

In-situ biological was applied at a gasoline service station in Northwestern Illinois. The geology consisted of predominately sand and gravel. The bulk of the contamination was dissolved phase material in this layer. Contaminants including benzene, toluene, ethyl benzene and xylenes (BTEX) were found in this zone.

The remedial approach consisted of a 2-phase in-situ biological injection program. This program targeted the predominant sand between 14-16 feet bgs. IET's liquid petroleum degrader, oxygen sources and nutrient blend were utilized during these phases. This was both to inoculate the site with the necessary pseudomonas as well as to prevent oxygen depletion. These phases were conducted approximately 100 days apart.

Outcome

Within a one-year period, the total BTEX concentrations were reduced from as high as 300 ug/l to levels non-detect. This site is now closed, following 3 quarters of confirmatory sampling.

“A resource for environmental professionals seeking innovative remedial alternatives.”