

Case Study

Site Description - MTBE and BETX Contamination

Site Location: Oldsmar, Florida

Site Description: This site is an active gas station located in Oldsmar, Florida. The area that was treated for BTEX/MTBE contamination was approximately 80' x 60' x 15'.



Contaminant: Gasoline and Diesel fuel. The site was reported to have moderate levels of contamination in the soil and groundwater.

Testing standards: All tests were performed by an independent 3rd party laboratory.
Methods - 5030/8021B - VOA (602) Compounds in Water by G.C)
3510/8270C - PAHs (610) in Water by GC/MS (ion trap)

Starting Contamination Levels: Groundwater samples were collected prior to start of project and at 3 month intervals.

Sampling Point	Benzene	Toluene	EB	Xylene	MTBE
CW-3	24	25	3.4	43	1,400

Recommended Treatment Method (in-situ) : The product was injected via steel rods to a depth of 15 feet. Soil and groundwater contamination was determined to be at a depth of approximately 2-15 feet. The local geology is summarized and suggests that the clays and limestone forming the top of the Peace River Formation of the Hawthorne Group is overlain by a 28-foot thickness of surficial sand with some clay in the 15-28 ft. bls zone. This site was treated in three stages.

Time Frame and Goal: The goal of the program is to achieve site closure in 10 months.

Results – Ending Contaminant Levels

Sampling Point	Benzene	Toluene	EB	Xylene	MTBE
CW-3	BDL	1.5	1.1	1.9	27

Outcome: The soil and groundwater was cleaned up to levels specified by the Florida Department of Environmental Protection (FDEP). The project was completed in ten months.