

CS02: Cost Comparison Support Platform Vs. DPT Injection

SITE

Active Gas Station, DeLand, FL

BACKGROUND

A release of gasoline fuel from a UST at this facility led to soil and groundwater contamination. The only prior remediation action taken at the site was the excavation of approximately 60 tons of soil from the tops of the USTs upon their closure. The site lithology consists of clayey sand and sandy clay. The Support Platform (SP) in conjunction with EN Rx Reagent was selected for remediation at the site upon complete site characterization.

INSITU COST COMPARISON

Based on the estimated contaminant mass, a chemical load of 35,000 gallons was recommended. For an injection of this size, site lithology becomes a large factor in estimating the total on site time. A slower injection rate was recommended based on the presence of sandy clay. The Support Platform was able to not only safely inject the full chemical load, but also demonstrated a huge cost savings when compared to traditional DPT injections.

Injection Technology	Injection Volume (gals)	Mobilization	Rate	Time	Total Cost
DPT Injection	35,000	\$ 550.00	\$3,500/day	18-35 days	\$64,650-\$124,150
Support Platform	35,000	\$ 6,750.00	\$5,500/month	6 months	\$39,750

*Support Platform mobilization includes system set-up and personnel training

**A rate of 1,000-2,000 gallons per day and 3 mobilizations were used to estimate DPT injection cost

RESULTS

During remediation activities the subject site experienced back pressure issues as well as surfacing, indicating if the traditional approach of DPT was taken, the cost would have been on the upper end of the estimate scale. Using the Support Platform, the field technician and EN Rx personnel successfully adjusted the system to a rate that alleviated pressure issues, while completing the injection in the proposed amount of time.

Another added benefit of the Support Platform was put to use on this site- additional reagent was recommended after groundwater sampling and was seamlessly injected into the on-site system without any extra mobilization or training required.



The calculated cost of using the Support Platform not only indicates a cost savings to the client, but also demonstrated a more effective injection strategy and an overall lack of business disruption.