



DEPARTMENT OF VETERANS AFFAIRS

PETROLEUM INVESTIGATION, REMEDIATION, AND
ALTERNATIVE SITE CLOSURE
Orlando, Florida

PROJECT HIGHLIGHTS

CLIENT PROFILE

The Department of Veterans Affairs (VA) is the federal agency responsible for providing health care services, benefits programs, and access to national cemeteries to former military personnel and their dependents. The VA oversees more than 250 hospitals and clinics and 300 veteran centers across the United States and abroad.

PROJECT OVERVIEW

The firm provided environmental assessment, remediation, and site closure services for the VA outpatient clinic located in Orlando. Limited site access due to underground utilities resulted in implementation of alternative closure strategies through the use of engineering and institutional controls. As a result, significant project savings were realized. Approval of the restrictive covenants was obtained in May 2016.

CHALLENGES

Contamination was discovered during the removal of multiple underground diesel fuel storage tanks. The associated contamination was located in the main utility corridor for the facility, so intrusive contamination removal and/or the use of potentially reactive reagents were not options for remediation. Additionally, alternative site closure with deed restrictions is not a standard approach for the VA. Effective communication strategies and stakeholder education programs were implemented to meet the project schedule and prevent issues with the mandated regulatory time frames.

THE MSE GROUP APPROACH

To assist the VA in the remediation process, the firm assembled a team of engineers and geologists experienced in assessment, remediation, and alternate closure strategies. The approach included negotiation of alternative closure strategies with regulators prior to completing the site assessment activities in order to streamline the project schedule and incorporate regulatory input into the final design to eliminate redesign costs.

The project team also provided support and coordination with VA stakeholders, subcontractors, and regulators to ensure project schedules were met and were in compliance with local, state, and federal regulations. The team also negotiated and implemented soil and groundwater site closure strategies to comply with remedial requirements of Florida Department of Environmental Protection Chapter 62-770 of the Florida Administrative Code.

ACCOMPLISHMENTS

- Completed extensive modeling to justify stability of residual groundwater impacts.
- Saved the VA over \$100,000 in additional assessment costs and \$500,000 in remediation costs.
- Designed and installed an engineering control structure to prevent direct human exposure and leaching of residual contaminants in soil.
- Implemented deed restrictions for groundwater, allowing the site to achieve a site rehabilitation completion order from the state.

AREAS OF EXPERTISE

- Environmental assessments for petroleum and hazardous materials
- Contamination assessment planning and reporting
- Remedial investigation, feasibility studies, and action planning



Our design/build team engineered and constructed onsite pollution control facilities.



Contractor technicians using hand techniques to determine the extent of soil impacts at the site.