USACE, SAVANNAH DISTRICT

WASTEWATER AND DRINKING WATER MAINTENANCE PROGRAM

Fort Stewart and Hunter Army Airfield, Georgia

PROJECT HIGHLIGHTS

CLIENT PROFILE

The U.S. Army Corps of Engineers (USACE) Savannah District oversees various programs at 11 military installations in Georgia and North Carolina and manages the water resources of the Coastal Georgia region. The District provides expertise and management for a broad variety of disciplines including engineering, architecture, design, construction, master planning, subsurface exploration, hydropower, and environmental stewardship.

PROJECT OVERVIEW

This task order was awarded to maintain compliance with the Clean Water Act and National Pollution Discharge Elimination System permits at Fort Stewart and Hunter Army Airfield (HAAF). The scope of work included assessment, dewatering, and removal of sediments from the industrial wastewater treatment plant (IWTP) ponds; repair of the pond liner system apron; assessment and removal/disposal of accumulated sediment within the Camp Oliver IWTP settling pond; and replacement of the hydropneumatic/chlorination drinking water supply tank at HAAF's non-commissioned officer training facility (TAC-X).

*"**Exceptional**" Contractor Performance Assessment Ratings for:*

- *Quality*
- *Schedule*
- *Cost control*
- *Management*

CHALLENGES

- Technical and budget limitations associated with traditional sediment removal.
- Unknown hazardous materials potential at TAC-X.
- Changed conditions at TAC-X due to unknown utilities in substandard condition.

THE MSE GROUP APPROACH

For the IWTP maintenance portion of the project, the firm developed and implemented an innovative pilot testing program for sediment removal. The process uses passive dredging and filtration techniques in lieu of removal via traditional excavation equipment. Results of the pilot program indicated that sediment removal goals could be achieved at lower costs than traditional excavation and would lower the risk of damaging the pond liner systems.

For TAC-X, the firm completed extensive hazardous materials testing and subsurface investigations to fully characterize existing conditions and prepare for in-field modifications that might occur. These efforts helped meet the project goals as well as comply with project budget and time constraints.

"The work completed at the IWTP was completed according to the scope of work, without incidents and on schedule. The installation was very satisfied with their performance."

– USACE Savannah District

ACCOMPLISHMENTS

- Saved the client over $200,000 due to implementation of the dredging/passive filtration sediment removal solution.
- Time-lapse video created for training at other Army installations.
- IWTP project now used by the Army as a model for similar project needs.
- Encountered and upgraded an unknown water distribution network at TAC-X at no extra cost to the government.

AREAS OF EXPERTISE

- Pilot testing and modeling
- Engineering design
- Permitting
- Hazardous building materials
- Turnkey design and construction services