DUAL PHASE EXTRACTION (DPE) REMEDIATION SYSTEM INSTALLATIONS

FORT BELVOIR MILITARY GARRISON
BUILDING 305 AND 1124 – NORTHERN VIRGINIA

Clients: **Mactec Engineering and Consulting, Inc.**
US Army Corps of Engineers

Contaminants: **Total Petroleum Hydrocarbons – TPH**

Impacted Matrix: **Saturated Soils and Ground Water**

Technology: **Conventional Excavation**

PROJECT OVERVIEW:

Specialty Earth Sciences, LLC (SE SCIENCES) was contracted to facilitate the installation of two ground water remediation systems, at two separate sites within the Fort Belvoir Garrison.

SE SCIENCES personnel completed all construction activities and site restorations within a 16-day time period, on budget.

Scope of Work Included:

- Installation and connection of (16) pneumatic pumps; and associated wellhead assemblies.
- Installation of (16) traffic rated steel access vaults with concrete collar finish.
- 800 linear feet of conveyance line excavation.
- Installation of 800 linear feet of 4" ID vacuum extraction piping, 1" ID ground water discharge tubing, ½" ID pneumatic pump air supply tubing, and 6" corrugated conduit (housed discharge and air supply tubing).
- Excavation, transport, and on-site staging of approximately 55 cubic yards of potentially impacted soils.
- Backfilling with compaction and asphalt resurfacing.
- Finish grade work with seeding and straw restoration.

BUILDING 305 – FORMER UST AREA

SUBSURFACE CONVEYANCE LINE TRENCHING.

CONVEYANCE LINE TO EXTRACTION WELL CONNECTION.

DPE SYSTEM CONNECTIONS: VACUUM, GROUND WATER INFLUENT, AND PNEUMATIC PUMP AIR SUPPLY.

DPE WELL-HEAD ASSEMBLY, HOUSED WITHIN ACCESS VAULT.

BUILDING 1124 – FUELING TERMINAL

GRASSY AREA BACKFILLING.

PRE-EXCAVATION UTILITY EXPOSURE, AIR-KNIFING.

ON-SITE STAGING OF POTENTIALLY IMPACTED SOILS.

SITE RESTORATION, GRADING ACTIVITIES.