# Statement of Qualifications

Environmental Site Assessments Phase I. II and III

Site Characterization and Investigation

Soil and Groundwater Remediation Services

In-Situ Remediation Technologies

Pilot Tests Operation and Monitoring

Risk Assessments and RBCA (Risk-Based Corrective Action) Clean ups

*Tank Services (Closures and Installations)* 

Hazardous and Non-hazardous/Solid Waste Management & Engineering

Mold Assessments & Remediations

Asbestos Assessments and Remediation

Free-Phase Product Recovery System

**Environmental Forensics** 



**Environmental Restoration Specialists** 

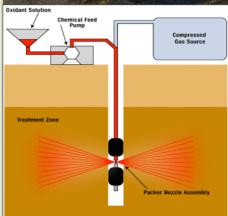
P. O. Box 249, Dorado, Puerto Rico 00646 Tel. (787) 278-0563, Tel. & Fax (787) 278-0560 and/or

P.O. Box 308744, St. Thomas, VI 00803 Tel. (340)-642-6665

> e-mail: onsitepr@onsitepr.com Web: http//www.onsitepr.com











## **Table of Contents**

Corporate History	2
<b>&lt;◆ Corporate Profile</b>	3-4
Human Resources (Principals)	.5-6
Our Customers	.7 <b>-</b> 8
Areas of Practice	9-10
Competitive Edge	.11
Working Alliance	12
Work History13	-33

# On-Site Environmental, Inc.'s Guiding Principles

- \*Strive to achieve long-term successful relationships with clients by focusing on client needs and performance results.
- \*Promote in all employees a strong sense of client services; On- Site Environmental, Inc. is a professional services company that must achieve client satisfaction while providing outstanding technical services.
- \*Maintain a staff of the highest possible caliber with respect to technical capabilities and professional experience with continuous training.
- \*Enable staff to perform projects within a strong management and peer review structure with an explicit emphasis on timeliness, budget control and value to client.
- \*Committed to provide first rate quality environmental services, which are completed in a timely and cost effective manner without compromising safety.

"Safety record is a matter of pride for us"

"We are committed to making our guiding principles work for every client and every project. We established these principles to ensure that our clients can keep their own commitments to their communities, customers, and employees. As a result of our implementation of these principles, 75 percent of our new business comes from referrals".



#### History

ON-SITE ENVIRONMENTAL, INC., (OSE) is a Puerto Rico and US Virgin Islands based environmental services company committed to the environmental restoration of soils, groundwater and building contamination. For more than two decades our main objective has been to eliminate contamination by using innovative environmental technology applications, which are environmentally safe and cost effective.

Our engineers, geologists and technicians have the knowledge, resources, and expertise necessary to solve current contamination problems using the best remediation technology. We also provide a full range of engineering, construction and operation and maintenance, and full service hazardous and industrial waste remediation and disposal services.

Our direct and consistent access to a wide variety of product resources is instrumental in our ability to develop the best and most rapid approach to your contamination problem. As an OSE client, you will have full advantage of our working alliances (among the best in the industry) that enable us to develop and test a workable solution to permanently eliminate contaminants from your site in a timely and cost effective manner without compromising safety.

Since our beginning in November 1993, we have successfully completed numerous site investigations in soil, groundwater and mold remediation projects. In addition, we are a Service-Disabled Veteran-Owned Business and a Small and Disadvantage Business (SDB) certified by the U.S. SBA.

**OSE** offices are conveniently located at North Coast Professional Village, Rd 693, Km. 12.9, Sabana Ward, Breñas, Vega Alta, Puerto Rico 00692 and in Randolph Harley Plant, Sub Base 18, St. Thomas, VI 00802

We appreciate your interest in us and look forward to the opportunity to serve you as a valued client of **ON-SITE ENVIRONMENTAL, INC.** 

"You can be sure that, if you have a contamination problem, we will resolve it for you"





#### Corporate Profile

**On-Site Environmental, Inc.**, was founded in 1993. Since then, the company is owned and operated by Ricardo N. Alvarez, P.E., R.E.M.

**On-Site Environmental, Inc.,** practice is focused on its knowledge of site investigations, environmental restorations and related sciences. Our scope of services includes planning, investigations, analytical testing, consulting, permitting, engineering, and remediation/construction phases. Our main areas of practice are:

#### **In-Situ Chemical Oxidation and Bioremediation:**

The use of oxidants and/or microorganisms to remove contaminants from the soil and groundwater systems. This method consists of direct injection of oxidants and/or microorganisms to contaminated soil and groundwater. These oxidants and microorganisms work to break down or detoxify contamination in soil or groundwater matrixes naturaly.

<u>Free Product Recovery System</u>: An innovative technology process and device for detecting and recovering floating hydrocarbons from the groundwater. This system is installed in monitoring wells showing the presence of floating free product delivering free product only waste stream and minimizing the collection of additional water for disposal.

Waste Management and Engineering: Engineering and sciences applied to contamination assessment and cleanups; the management, minimization, treatment and disposal and packing of hazardous and non-hazardous, solid and industrial waste, RCRA Sites and Landfill Closures as per USEPA and PREQB regulatory standards.

<u>Site Investigation and Characterization including</u>
<u>Technical and Laboratory Services:</u> Drilling and collection of soil and groundwater sampling, analysis, testing and geophysical testing systems.

Risk Assessment and RBCA Cleanups: Estimating human health risk from exposure to contaminated media; Determine levels of human health risk posed by the Chemicals of Concern (COC's); Determine Site Specific Target Levels (SSTLs) for remediation.



**DPT/HSA Drilling Equipment** 



Soil & Groundwater DPT Sampling



Underground Storage Tank Removal



#### Corporate Profile

#### **Mold Assessment and Remediation:**

In-Situ Mold Remediation is revolutionizing the Mold Remediation Industry. It can be applied to houses, apartments, buildings, offices, theaters, hotels and casinos, schools, boats or any indoor contaminated area, reducing sanitation time, labor costs, hot water consumption and harmful chemicals. OSE uses selective products and solutions meeting the specific needs of both disinfection and deodorization protocols enabling a comfortable, safe ambiance, following the Institute of Inspection Cleaning and Restoration Certification (IICRC), specifically IICRC S520 and the Standard Reference Guide for Professional Mold Remediation. Also, trained and experienced labor, in compliance with OSHA's Hazcom Standard, 29 CFR 1910.1200.



OSE's goal is zero accidents and Keeping in mind that "Safety is a Core Value"





#### **Human Resources (principals)**

On-Site Environmental, Inc. is committed to promote in all employees a strong sense of client services. Maintain a staff of the highest possible caliber with respect to technical capabilities and professional experience with continuous training. All employees and staff are trained according to Occupational Safety and Health Administration (OSHA) requirements.

#### RICARDO N. ALVAREZ, PE, REM

Principal and General Manager of Operations.

BS-Civil Engineering, University of Texas- Eng. Alvarez is a registered professional engineer by the PR Board of Engineers and Land Surveyors since 1983, License No. 9078. Post-graduated courses in Environmental Engineering Management from the Polytechnic University of Puerto Rico, Hato Rey, PR, 1998. He has been a Registered Environmental Manager (REM) by the National Registry of Environmental Professionals since 1995, License No. 7982. Eng. Alvarez has over twenty-five years of experience in environmental management and remediation projects. Eng. Alvarez has broad professional experience in the areas of Site Investigations and Characterizations, Underground Storage Tank Closures/Installations, Removals, Remedial Services, RCRA Sites Closure Engineer in Record, Landfill Sites Closure Certifications, etc. Member of the AEHS Foundation advisory board. Counselor of bioremediation project research and innovative remediation technologies development of EPA Brownfields Program. Well versed knowledge of federal and local environmental regulations specializing in on-site/in-situ clean-ups of polluted and/or affected areas. Author of paper "Perozone® Groundwater Sparging of a Fuel Spill in Aymamon Limestone Deposits in Puerto Rico" presented at 27th Annual International Conference on Soils, Sediments, Water, and Energy, In addition, Eng. Alvarez has co-authored two posters presented at the Seventh International Symposium of In-Situ and On-Site Bioremediation: "Aerobic/Anaerobic In-Situ Bioremediation of Diesel Contaminated Soil" and "Bioremediation of Diesel Polluted Soil and Groundwater Under Denitrifying Conditions".

Contact me at: ralvarez@onsitepr.com

On-Site Environmental, Inc. is composed of a full staff of experience project managers, chemist, superintendents, equipment operators, and hazardous material technicians. All personnel mobilizing to your site will have been properly trained and certified as hazardous materials personnel.

"We combine our strong regulatory knowledge and technical expertise to develop innovative, cost-effective solutions."



#### **Human Resources (cont.)**

## Hermes Chacon Rodriguez, P.G.

Project Manager

Certified Professional Geologist (PG), University of Puerto Rico, Mayagüez Campus, B.S. in Geology, Minor in Biology, emphasizing chemical and biological environmental pollution, Geochemistry, Geological Engineering and Psychology. University of Wisconsin, Milwaukee. Responsible for coordination and management of environmental regulatory compliance projects, including hazardous and non-hazardous solid waste management, hydrogeological site investigations, site characterizations with soil and groundwater sampling and underground storage tanks remediation. Preparation and revision of technical specifications for site assessments, groundwater monitoring systems, and remediation procedures at landfill facilities as well as RCRA sites. Project management and environmental compliance for non-hazardous solid waste landfill facilities. Phase I, II, and III environmental site assessment, feasibility studies for pharmaceutical facilities, petrochemical refineries, fuel pipelines delivery systems and power industries. Field characterization of hazardous waste streams, waste inventory and sampling in Level B. Production and monitoring wells permitting and construction. HAZWOPER 40 hr. Certification. Contact me at: hchacon@onsitepr.com

On-Site Environmental, Inc. is supported by a team of experts which advise on disposal options field remediation techniques, and changes in regulations such as "OSHA", "DOT", and "EPA" to assure compliance with federal and local regulations.

Our staff safety record with vast experience in the field has maintained site safety while meeting operational goals.

"You will have full advantage of our working alliances (among the best in the industry) that enable us to develop and test a workable solution to permanently eliminate the contamination from your site."



#### Our Customers

**AECOM/URS Corporation** 

Aireko Construction Management Services, LLC Aerostar Environmental Services, Inc.

**AIP Holdings, LLC** 

AMEC Earth & Environmental, Inc.

Autoridad Financiamiento de la Infraestructura de PR Avis Rent a Car System

Bureau of Motor Vehicles, St. Thomas, V.I.

Bureau of Motor Vehicles, St. Thomas, V.I. Banco Popular de Puerto Rico

Calvary Baptist Tabernacle & Christian Ministries Camp Dresser & Mc Kee, Inc. (CDM-Smith)

Capital Crossing Servicing Co.

Capitol Environmental Services, Inc.

**CH2MHILL** 

Citigroup N.A.

**CMA Architects & Engineers LLP** 

**Construcciones Jose Carro** 

Constructora Santiago Corp.

Conti Federal Services, Inc.

Dakota Technoligies Co., LLC

**DAWSON** 

DCKJ Worldwide/Sirenusa Condominiums

**DH Construction Corp** 

**Dorado Beach Resort** 

Earth Tech., Inc.

**Eli Lily Industries** 

**Embassy Suites Hotel Dorado** 

Entrix, Inc.

Frederiksted Health Care, Inc., St. Croix V.I.

**GM Group** 

Go-Fast Marina, St. Thomas, V.I.

Golder Associates, Inc.

Government Development Bank for Puerto Rico

Green Cay Marina, St. Croix, V.I.

**Guardian Environmental Services** 

**GZA** Geoenvironmental, Inc.

Industria Lechera de Puerto Rico - Indulac

Jones Lang La Salle/Citi

**Kent Meters** 

Las Piedras Construction, Corp.

Law Engineering and Environmental Services Law Office of John K. Dema, PC, St. Croix, V.I



Site Investigation Project



**DPT Substrate Injection Project** 



Free Product Recovery Project



Perozone Injection Wells Project



#### **Our Customers-Continued**

Martinez Odell & Calabria Law Offices Mc Neil Healthcare LLC Michael Baker Environmental Corp. Microsoft Caribbean, Inc. Municipality of Dorado, Puerto Rico Municipality of Vega Baja, Puerto Rico O'Neill & Borges Law Offices Pace Analytical del Caribe Pedro Panzardi & Associates **Puerto Rico Air National Guard Puerto Rico Aqueduct & Sewer Authority Puerto Rico Electric Power Authority** Puerto Rico Industrial Development Co. **Puerto Rico Land Authority Puerto Rico Ports Authority Puerto Rico Public Building Authority Puerto Rico Telephone** Right Way Environmental, Inc. Science Applications International Corp. Scotiabank de Puerto Rico Shaw Environmental, Inc. Sugar Bay Resort, St. Thomas, USVI The Payne Firm, Inc. Toyota Motor Sales, USA, Inc. **Transystems Corporation** U.S. Environmental Protection Agency U.S. General Services Administration **UBS Financial Services Inc. of Puerto Rico** University of Puerto Rico, RUM Campus University of the Virgin Islands, St. Thomas, USVI **US Army Reserve Command US Corps of Engineers US Department of the Army US Department of the Navy US Veterans Administration** VI Housing Authority, St. Thomas, USVI VI Internal Revenue Bureau, St. Thomas, USVI Virgin Islands Water & Power Authority Visteon Caribbean, Inc. Warner Chilcott Weston Solutions, Inc. **WSP Environmental Strategies** 

Wyndham Vacation Ownership, Inc.



Product Recovery Pump System



In-Situ Bio-Slurping System



#### **Areas of Practices**

## INSITU CHEMICAL OXIDATION AND BIOREMEDIATION

- \*Perozone (Hydrogen Perozide) Microbubbles Injection
- \*Air-Sparging Systems
- \*In-Situ Soil & Groundwater Remediation and Monitoring
- \*Pilot Test for Air Sparging to determine injected air flow patterns in the saturated zone, Radius of Influence (ROI), Hydraulic Conductivity (Slug Tests) to determine injected air transitivity, Dissolve Oxygen (DO) concentrations, Oxidation and Reduction Potential (ORP), to obtain optimum design and operational parameters for a full-scale In-Situ Remediation System.

## ENVIRONMENTAL MANAGEMENT AND POLLUTION CONTROL

- \*Environmental Planning, Permitting and Forensics
- \*Landfill and RCRA Sites Closures
- \*Corrective Actions for Regulatory Compliance
- \*Site Investigation, Assessment and Audits

## HAZARDOUS AND NON HAZARDOUS/ SOLID WASTE MANAGEMENT & ENGINEERING

- \*Solid Waste Management & Waste Minimization
- \*Health & Safety
- \*Site Evaluation and Clean-up

#### UNDERGROUND INJECTION CONTROL (UIC)

- \*PREQB/USEPA Permitting
- \*Environmental Clousure & Design
- \*Sampling and Analysis

#### TANK SERVICES

\*Underground Storage Tanks (UST's) and Above Storage Tanks (AST's) removal, closure, installation and permitting.

#### **DRILLING SERVICES**

\*Drilling and installation of monitoring wells, collection of soil and groundwater samples for laboratory analysis.

#### FREE-PHASE PRODUCT RECOVERY SERVICES

\*Installation, Operation and Monitoring of free-phase product recovery systems from monitoring wells.



Perozone (Chem-Ox) Injection System



Trailer for Perozone Injection System



#### **Areas of Practices (Continued)**

## RISK ASSESSMENT AND RBCA (RISK-BASED CORRECTIVE ACTION) CLEAN UPS

- \*Environmental, Ecological, Human Health Risk Assessment on the existing affected soil and/or groundwater and the possibility of impacting the neighborhood residential and ecological sensitive areas.
- \*Analytical Fate and Transport Model using standard procedures outlined in the US EPA's Risk Assessment Guidance.
- \*Corrective actions consistent with industry standards, ASTM 1739.
- \*Risk Based Corrective Actions applied at Petroleum release and Leaking Underground Storage Tanks (LUST) sites.
- \*Site Conceptual Models to estimate the potential exposure pathways, the fate and transport of the chemical of concern at the site and receptors.

#### MOLD ASSESSMENT AND REMEDIATION

- \*Cleaning and Sanitizing Applications to eliminate Mold Growth Spores and Post Remediation Mold Assessment.
- \*In-Situ Mold Remediation can be performed houses, apartments, buildings, offices, theaters, hotels and casinos, schools, boats or any contaminated area.

#### **Human Health Risk Assessment**

- •A qualitative and quantitative process for determining the chances for adverse health effects in people who may be exposed to environmental hazards.
- •A means to develop chemical clean-up standards that are protective of human health.
- Provides Method for Allocation
   Resources Effectively Based on Site
   Risk.

#### Where can RBCA be applied?

- •RBCA can be applied to any site where contaminants exist in the environment and decisions need to be made regarding protection of human health.
- •Petroleum facilities, industrial plants, TSD facilities, Solid Waste Landfills, Brownfields, LUST, etc.

#### **RBCA Advantages**

- •Decisions are based on reducing risk of adverse health effects.
- •Assessment activities are focused on collecting only that information needed for risk assessment.
- •Compliance can, in many cases, be achieved faster and at lower cost and still be protective to human health.



#### Competitive Edge

On-Site Environmental, Inc. is aware that joining efforts between industrial, academic and government sectors is necessary for securing competitiveness in Puerto Rico as stated by Puerto Rico's Policy on Science and Technology.

- \* Memorandum of Understanding with the University of Puerto Rico, Mayagüez Campus (UPRM) to promote research, development, and technology transfer of bioremediation technology and contribute to the scientific and engineering development.
- \* First company in bioremediation services in Puerto Rico.
- \* Sponsored the Seminar "Environmental Situation in Puerto Rico: Solutions for the New Millennium in 2000."
- \* Co-sponsored with Puerto Rico Engineers and Surveyors Association (C.I.A.P.R.) Conference of:
  - -bioremediation of soil & ground water contamination -keynote speaker, Lcdo. Héctor Russe Martínez, Chairman of Puerto Rico Environmental Quality Board (PREQB).
- \* Member of the:
  - AEHS, Association of Environmental Health of soils.
  - PR Experimental Program to Stimulate Competitive Research (EPSCOR).
  - Small Business Technology Transfer Program (STTR).
- \*Sponsored the Seminar "Restauración Ambiental Para un Desarrollo Sostenible: Alternativas y Nuevas Tecnologías"in 2003.
- \* Service-Disabled Veteran-Owned Business and Disadvantage Business Enterprise Certified by the Small Business Administration.
- \* Member of the advisory board of the "Península de Cantera" Brownfields Pilot Program since 1999. Revised the UMET Curriculum Proposal for additional funds to continue with the Península de Cantera Training Brownfields Pilot Program.
- \*Counselor of bioremediation project research and innovative remediation technologies development of EPA Brownfields Program.
- \*Sponsored the Natural Attenuation, Risk Assessment, and Risk-Based Corrective Action Seminar (October 2003).
- \*Successfully completed over one hundred (100) site investigations and soil and groundwater remediation projects.

## TREATABILITY STUDIES AND PILOT PROJECTS FOR:

The Treatability Studies and Pilot Projects were sponsored by OSE and performed at the Microbial Ecology Laboratory Department of Microbiology at the University of Puerto Rico at Mayagüez.

- a. Bioremediation of nitrate contaminated groundwater from Manatí - Vega Baja aquifer.
   A treatability study for the effectiveness of a denitrification compound for the nitrate contaminated groundwater.
- b. Anaerobic Bioremediation of Saturated
  Petroleum Hydrocarbon Contaminated Soil
  A treatability study to evaluate the effectiveness
  of anaerobic nitrate respiration to remediate
  saturated soil contaminated with petroleum
  hydrocarbons..
- c. Phytoremediation to remove heavy metals from ammunitions contaminated soil

A treatability study to evaluate the phytoextraction of heavy metals and accumulation in the plants tissues.

d. Bioremediation of Diesel Contaminated Soil under Denitrifying Conditions at PREPA Gas Turbine Station, Vega Baja, PR

A pilot project to evaluate the effectiveness of bioremediation as an alternative for cleaning diesel contaminated saturated soil using nitrate as an electron acceptor in the biological oxidation of hydrocarbons present in the soil.

e. Bioaugmentation of Diesel Contaminated Soil at PREPA Gas Turbine Station, Vega Baja, P.R.

A pilot project where indigenous denitrifying bacteria from the site were cultivated and enriched with nutrients. This bioactive solution was injected into the contaminated soil to evaluate the reduction of petroleum hydrocarbons in the soil.

"Since our beginning, we have successfully completed over 100 site investigation and soil and groundwater remediation projects."



#### **Working Alliance**

#### **CDM-SMITH**

**OSE/CDM-Smith** has worked an agreement with the United States Environmental Protection Agency (USEPA) for Design and Engineering Services (DES). OSE/CDM-Smith has performed various Remedial Investigation/Feasibility Studies at various Superfund Sites in Puerto Rico. **OSE** as Team Subcontractor, provides Geologists, Engineers, Scientists and Environmental Technicians experienced in environmental investigations, remediation and documentation. CDM-Smith under DES contract prepares remedial investigations and design for the USEPA, Region 2 at various Superfund Sites in Puerto Rico. Other works consists of locating and surveying installed monitoring wells, drilling, installation and purging of monitoring wells, collecting soil and groundwater samples and documentation, Site Specific Quality Assurance Project Plan, Site Specific Health and Safety Plan, GIS mapping and Oversight. Requirements such as quality assurance /quality control program are provided under on-site audits/inspections by EPA representatives. **OSE** furnishes highly experienced and qualified personnel, drilling equipment and supplies to support EPA Region II through the continuing Design and Services Contract Service Program in Puerto Rico and the U.S. Virgin Islands.

#### WESTON SOLUTIONS, INC.

OSE personnel assists USEPA in the planning, execution and implementation of solutions for site cleanup and the alleviation of damage caused by hazardous substances and oil, multi-media sampling, including air, solids and liquids, disposal methods for hazardous waste, personal protective equipment, technical writing and computer skills, environmental assessments of contaminated or potentially contaminated sites impacted areas during the Hurricanes events. Assessment and Removal Action Oversight, Assistance to EPA Officials during Emergency Response, Chemical Emergency Preparedness and Prevention support, Oil Pollution Act Compliance support, Information management/GIS support. As required by Weston Solutions, Inc. and USEPA, OSE technical personnel, fluently bilingual (speaking and reading English as well as Spanish), supported assignments in Puerto Rico and the U.S. Virgin Islands.



Slurry Wall Impermeable Construction



Hazardous & Non-hazardous Waste Management Project



Underground Storage Tank Removal



#### PHASE I, PHASE II AND SITE INVESTIGATION & ASSESSMENTS

**Puerto Rico Electric Power Authority (PREPA)** – Drilling, Soil sampling and Assessment at PREPA, Central Costa Sur, Guayanilla, PR

**Puerto Rico Electric Power Authority (PREPA)-** Drilling, Environmental Site Assessment at Central Aquirre Ciclo Combinado, (Restricted Areas D & E) PREPA, Salinas, PR.

Cooperativa de Camioneros de PR – Drilling and Site Assessment for Gasoline Spill at Dorado, PR.

**Puerto Rico Aqueduct and Sewer Authority** – Drilling, Site Assessment at Fajardo Garden Pump Station, Fajardo, PR.

**Municipality of Dorado** – Drilling and Site Assessment for hydrocarbon affected soils at Taller de *Obras Públicas* in Municipality of Dorado, Dorado, PR.

**Red Service Station** – Drilling and Site Assessment for hydrocarbon affected soil and groundwater at Red Point Service Station in Caguas, PR.

**Puerto Rico Electric Power Authority (PREPA)** –Drilling, Site Investigation of hydro-carbon affected soil and groundwater at former PREPA Cotton Plant, Santurce, PR.

**Puerto Rico Aqueduct and Sewer Authority** – Drilling and Site Investigation of hydrocarbon affected soil and groundwater at various sites of Puerto Rico Aqueduct and Sewer Authority.

**U. S. Army Reserve Command-** Drilling and Site Investigation of hydrocarbon affected soil at, Fort Buchanan, Guaynabo, PR.

**Puerto Rico Aqueduct and Sewer Authority-** Drilling and Site Investigation and remedial action works at Waste Water Treatment plant, Puerto Nuevo, PR.

**U. S. Army South** – Drilling and Site Characterization at Emergency Generator Site, Area 200, U. S. Army South, Fort Buchanan, Guaynabo, PR.

**Puerto Rico Electric Power Authority (PREPA)-** Drilling and Site Characterization at "Taller de Mecánica Automotriz" in PREPA, Humacao, PR.

**U. S. Army Reserve Command** –Drilling and Site Investigation and remedial works at U.S. Army Reserve Center, AMSA, San Juan, PR.

**CERES Caribe, Inc.** – Drilling and Site Investigation for hydrocarbon affected soil at Cerrillos Dam, Ponce, PR (USCOE Project).

**U. S. Army Reserve Command** – Drilling and Site Investigation and remedial action works at U.S. Army Reserve Center, Bayamón, PR.



#### PHASE I, PHASE II, AND SITE INVESTIGATION & ASSESSMENT - CONTINUED

**Puerto Rico Telephone Company (PRTC)** – Drilling and Site Characterization at former PRTC Facility in Guaynabo, PR.

**Puerto Rico Telephone Company (PRTC)** – Drilling and Site Characterization and bioremediation at PRTC in Rexville Station, Bayamón, PR.

Estación Experimental Agrícola – Drilling and Site Characterization at Agricultural Station, Gurabo, PR.

**EH&S Consultants** – Drilling and Site Characterization at Bayamón Municipality Site, PR.

**Right Way Environmental Contractors, Inc.** – Drilling and Site Characterization of hydrocarbon for UST 561 at former Ramey Air Force Base, Aguadilla, P.R.

**University of Puerto Rico, Mayaguez Campus** – Drilling and Site Characterization for five (5) locations from former Underground Storage Tank at University of Puerto Rico, Mayaguez Campus. Mayaguez, PR.

**Puerto Rico Electric Power Authority (PREPA)** – Drilling and Site Characterization at Center of Technical Operations Station at Puerto Rico Electric Power Authority, Ponce, PR

**Puerto Rico National Park Company** – Drilling and Phase I Environmental Site Assessment (ESA) Puerto Mosquito Lot, 119 acres in Vieques, PR.

**Puerto Rico Electric Power Authority (PREPA)** – Drilling and Site Characterization at Central Aguirre, Salinas, PR.

**65**<sup>th</sup> **U.S. Army Regional Support Command** – Drilling and Site Investigation at AMSA 161 Military Vehicle Parking, Fort Buchanan, Guaynabo, PR.

**Right Way Environmental Contractors, Inc.** – Drilling and Site Investigation at Gulf Gas Station #436, required by P.R. Environmental Quality Board, Santurce, PR.

**Cape Environmental Management, Inc.** – Drilling and Site Characterization at the Building 3 Gallery US Naval Security Group, Sabana Seca, P.R.

Martínez Odell & Calabria & Municipality of Carolina, P.R.- Phase I Environmental Site Assessment for vicinity areas of the Luis Muñoz Marin International Airport in Carolina, PR.

**Puerto Rico Government Development Bank of Puerto Rico** – Drilling and Site Investigation, remedial action works and recommendations at their new facilities located in Santurce, P.R **Environmental Power** – Drilling and Site Investigation and remedial action works recommendations al Walmart, Inc. facilities, Santa Isabel, PR

**Toyota Motor Sales, USA** – Drilling and Site Investigation activities at Toyota Motor Facilities in La Muda and Río Piedras, P.R.



#### PHASE I, PHASE II, ANS SITE ASSESSMENT - CONTINUED

**Puerto Rico Telephone** (**PRT**) – Drilling and Site Investigation of Contaminated Soil at PRT Facilities in Mayaguez Mall, Mayaguez, PR

**Citibank Group P.R.** – Drilling and Site Investigation at former UST location at Citibank Tower, Hato Rey, P.R.

**Commonwealth Oil Refining Companies (CORCO)** – Drilling and Monitoring Wells Installation and Groundwater sampling at various locations at CORCO facility, Peñuelas, P.R.

**Citigroup, N.A.** – Phase I Environmental Assessment for Citibank Building, Cupey property, San Juan, P.R. (Phase I ESA)

CH2MHILL – Drilling and Monitoring Wells Installation Prang Muñiz Air Force Base, Carolina, P.R.

Dr. Carlos Murati – Drilling and Site Investigation, Gulf Service Station #558, Ponce, P.R.

Pace Analytical del Caribe – Drilling and Soil Sampling, San Juan Waterfront

**Right Way Environmental, Inc.** – Drilling and Monitoring Wells Installation at Former Navy Roosevelt Roads Base, Ceiba, P.R.

**Constructora Santiago II, Corp.** – Drilling, Soil and Groundwater Sampling and Monitoring Wells installation for Site Investigation at San Juan Waterfront, Pier 6, San Juan, P.R.

**Pirate Cove Marina** – Drilling and Monitoring Wells installation, Soil and Groundwater Sampling and Site Investigation at Pirate Cove Marina, St. Thomas, USVI

**CDM Federal** – Drilling and Soil Sampling Collection and Management at Scorpio Superfund Site, Toa Baja, P.R.

**Sucesion Serracante** – Soil and Groundwater Sampling Collection and Analysis at former Baxter Laboratories, Aibonito, P.R.

**CDM Federal -** Field Investigation for Soil and Groundwater Sampling Collection and Management at Cidra Groundwater Contamination Superfund Site, Cidra, P.R.

**CDM Federal -** Field Investigation for Soil and Groundwater Sampling Collection and Management at Maunabo Groundwater Contamination Superfund Site, Maunabo, P.R.

**Green Cay Marina** – Drilling, Sampling and Monitoring Wells Installation for Soil and Groundwater Investigation and Environmental Forensic Study, St. Croix, USVI.

**Weston Solutions, Inc.** – Drilling and Sampling for Soil and Groundwater Investigation at Dorado, P.R. for US EPA Region V Superfund Technical Assessment and Response Team III .

**Weston Solutions, Inc. -** Drilling and Sampling for Soil and Groundwater Investigation at Cayey, P.R. for US EPA Region V Superfund Technical Assessment and Response Team III .

**URS Corportaion -** Groundwater Wells Rehabilitation and Gauging, LNAPL Removal and Recovery Measurements, Well Development and Soil Investigation (DPT Drilling and Sampling) around Existing Underground Storage Tank Farm at Former Shell Terminal, Guayanilla, Puerto Rico.



#### PHASE I, PHASE II, ANS SITE ASSESSMENT - CONTINUED

**Scotiabank de Puerto Rico** – Phase I Environmental Assessment for Única Realty Property vacant tract located at Road No. 956, KM 2.2 Guzmán Abajo Ward, Río Grande, P.R.

**Scotiabank de Puerto Rico** – Phase I Environmental Assessment for Empresas Almacenes del Caribe located at Parcel #3, Bahia Industrial Park, Palmas Ward, Cataño, P.R.

**Jones Lang LaSalle -** Phase I Environmental Assessment for Coqui Net Building property, Guaynabo Industrial Park, Guaynabo, Puerto Rico

**Jones Lang LaSalle -** Phase I Environmental Assessment for Floors 4 & 5 McConnel-Valdez Building, Hato Rey, Puerto Rico

**Scotiabank de Puerto Rico** - Phase II Environmental Site Assessment (ESA) for GH Forest, Road PR 19, northeast of km. 5.1, Monacillos Ward, Guaynabo, P.R.

**Scotiabank de Puerto Rico** - Phase II Environmental Site Assessment (ESA) for Caso Oreo - Levitt Homes (1600392060), located on road PR 199, Frailes Ward, Guaynabo, P.R.

**Scotiabank de Puerto Rico -** Phase I Environmental Assessment for Agua Salada Development at road #187, Km. 9.2, Medianía Baja Ward, Loíza, P.R.

**Michael Baker Corporation -** Direct push technology (DPT) soil sampling services for environmental work at SWMU 71 former Quarry Naval Activity Puerto Rico (NAPR), Ceiba, P.R.

**Michael Baker Corporation -** Direct push technology (DPT) sampling services in conjunction with work being conducted for the Naval Facilities Engineering Command (NAVFAC) Southeast Division at Naval Activity Puerto Rico (NAPR), Ceiba, P.R., at various Solid Waste Management Units.

**Michael Baker Corporation** - Direct push technology (DPT) sampling services for environmental work at Naval Activity Puerto Rico (NAPR) in support of the U.S. Navy. The work consists of soil sampling and monitoring wells installation at SWMU 28.

**CH2Mill Corporation** – Monitoring Wells Installation, Groudwater Sampling and Direct Push Technology for Pilot Test Substrate Injections at SWMU NO. 27 Peñuelas Technology Park, LLC, Peñuelas, P.R.

**Scotiabank de Puerto Rico** – Phase II Environmental Site Assessment (ESA) for Eduard Ruiz Valentin property, former All Star Service Station at # 292 Post Street, Sábalos Ward, Mayaguez, Puerto Rico.

**Black and Veatch Puerto Rico -** Environmental Site Assessment (ESA) for Aguas Buenas / Caguas — Trunk Sewer Phase III - Archaeological Mitigation Area, Caguas, P.R.

MTBE Litigation Puerto Rico – Puerto Rico Environmental Quality Board - Drilling, Monitoring Wells installation and Sampling for groundwater investigation at various pre-identified MTBE polluted sites around Puerto Rico.



#### PHASE I, PHASE II, ANS SITE ASSESSMENT - CONTINUED

**Scotiabank de Puerto Rico** – Phase I for commercial building located at Rio Piedras (down town), San Juan, P.R.

**Scotiabank de Puerto Rico** – Phase I Environmental Assessment for commercial Service-Gas Station located at Road #3, Carolina, P.R.

**Scotiabank de Puerto Rico** - Phase II and Phase III Environmental Site Assessment (ESA) for former Master Concrete Corporation, Toa Baja, P.R.

**Scotiabank de Puerto Rico** - Phase II and Phase III Environmental Site Assessment (ESA) for former Union Carbide Graffito, Yabucoa, P.R.

**Scotiabank de Puerto Rico -** Phase I Environmental Assessment for Auto Dealer at road #1, La Muda, Caguas, P.R.

**Michael Baker Corporation** - Direct push technology (DPT) sampling services for environmental work at Naval Activity Puerto Rico (NAPR) in support of the U.S. Navy. The work consists of soil sampling and monitoring wells installation at SWMU 14.

**CH2Mill Corporation** – Direct Push Technology (DPT) sampling services for soil and groundwater at SWMU NO. 27 Peñuelas Technology Park, LLC, Peñuelas, P.R.

**Scotiabank de Puerto Rico** – Phase I and Phase II Environmental Site Assessment for Israel Benitez Service-Gas Station, Ponce, P.R.

**Scotiabank de Puerto Rico** – Phase II Environmental Site Assessment for Ricardo Rosello at Eduardo Conde, Santurce, San Juan, P.R.

**Scotiabank de Puerto Rico** – Phase I Environmental Assessment for commercial property (Luis Colon), Corozal, P.R.

**Scotiabank de Puerto Rico** – Phase I Environmental Assessment for commercial Service-Gas Station Paso Gas Corp., Morovis, P.R

**Scotiabank de Puerto Rico** – Phase I and Phase II Environmental Site Assessment for commercial property Automotive Service Center, Ponce, P.R

**Capital Crossing Corporation** - Phase I 205 Environmental Site Assessment Mix Building Eleanor Roosevelt, Hato Rey, San Juan, PR

**Capital Crossing Corporation -** ESA Phase I, Lot B16 & B17, Corner of Road PR-172 and Monaco Street, Caguas, P.R.

**Capital Crossing Corporation**. Environmental Site Assessment Phase I Lot 6 & 7, Principal Street, Los Frailes Ward, Guaynabo, P.R.



#### **REMEDIAL ACTION PROJECTS**

**Earth Tech, Inc.,** - Monitoring and recovering light non-aqueous phase liquid (LNAPL) from groundwater wells at former Visteon Caribbean, Canóvanas, PR.

Puerto Rico Aqueduct & Sewer Authority -Soil remediation at AAA Pump Station in Dorado, P.R.

**Constructora Hartmann** - Soil remediation of approximately 2,000 cubic yards at Storm Sewer Box Culvert Nuevo Centro de San Juan, PR.

**McLaren Hart/Entrix Corporation**- Environmental Planning and decommissioning activities at Visteon Caribbean, former Ford Motor Company, Canóvanas, PR.

**Puerto Rico Air National Guard (PRANG)-** Removal, transportation, and disposal of the existing oil stained soil at Camp Santiago Military Reservation, Salinas, PR.

**Puerto Rico National Guard (PRANG)** - Hazardous waste pick-up and proper disposal of drums at various PRANG locations in Puerto Rico.

**CMA Architects & Engineers LLP** - Sampling, chemical analyses, removal, transportation and disposal of surface water contaminated with hydrocarbon at Antigua Tabacalera in Aibonito, PR.

**Puerto Rico Land Authority** - RCRA Corrective Action as required by EPA Region II that consisted of identifying, re-packing, transportation and disposal of 590 drums with hazardous and non hazardous waste at Central Mercedita in Ponce, PR.

**Puerto Rico Land Authority** - Remedial Action in NPL Site # PRD987367299 required by the EPA for the removal and disposal of hazardous and non hazardous waste stored on the Pesticide Warehouse, Manatí, PR.

**University of Puerto Rico, Mayaguez Campus** - Free Product Recovery from groundwater at University of Puerto Rico, Mayaguez Campus, Mayaguez, PR

**U.S. Department of the Navy-** Collect, Test and Disposal Hazardous Materials at Crown Mountain, St. Thomas, U.S. Virgin Islands.

**Puerto Rico Housing Finance Authority -** Slurry Impermeable Wall construction for Arsenic contaminated soil in New Secure Home Program at Canovanas, PR.

**San Patricio MRI & CT Center** – Removal and disposal of hydrocarbon (diesel) affected soil at future site for San Patricio MRI & CT Center, Guaynabo, P.R.

**Right Way Environmental, Inc.** – Monitoring Wells Installation and Free Product Recovery System for Shaw Environmental, Inc.'s U.S. Corps of Engineers' project at Ft. Buchanan, P.R.

**DH Construction Corporation** - Removal, transportation and disposal of electrical transformers oil and water from existing pit, Mayaguez Mall, Mayaguez, P.R.

**Government Development Bank of Puerto Rico** – Excavation, Transportation and Disposal of approx. 9,000 cuyds of hydrocarbon impacted soil for GDB new facilities located in Stop 26, Santurce, PR



#### REMEDIAL ACTION PROJECTS- CONTINUED

**WSP Environmental Strategies** – Drilling & Injection Services to support Pilot Testing for "Perozone" (In-Situ Chemical Oxidation) at an industrial facility located in Arecibo, P.R.

**US ARMY FT. Buchanan** – Free Product Recovery System from former Gas Station at Ft. Buchanan, Guaynabo, P.R.

**Virgin Islands Water and Power Authority -** Site Assessment and Spill Mitigation Actions (Free-Phase Product Recovery) performed at Randolph E. Harley Facility, Virgin Islands Water & Power Authority, St. Thomas, VI, as per US Coast Guard Administrative Order Number 004-17

Toyota de Puerto Rico - Scrap Metal Removal, Transportation, and Disposal, Guaynabo, P.R.

**MWH Americas, Inc.** – Removal and Disposal of lead-based paint chips and lead contaminated soil at the USCG Ham's Bluff Lighthouse, St. Croix, U.S. Virgin Islands.

**Virgin Islands Regulated Waste Management, Inc.** – Lab Pack and preparation for disposal of various chemicals at Roy Schneider Hospital, St. Thomas, US Virgin Islands.

**Dorado Beach Resort** – In-Situ Chemical Oxidation of "Perozone" to groundwater impacted with gasoline with high concentration of Benzene and Total Petroleum Hydrocarbons (TPH) from Underground Storage Tanks.

Water and Air Research, Inc. - Air Sparge and Soil Vacuum Extraction (AS/SVE) pilot test, well drilling and installation, soil and groundwater sampling at US Army Ft. Buchanan, Guaynabo, P.R.

**AEROSTAR Environmental Services, Inc.** – In-Situ Chemical Oxidation of "Perozone" to groundwater impacted with petroleum hydrocarbons from a leaking Underground Storage Tank at Bldgs. 379 and 380 US Army Ft. Buchanan, Guaynabo, P.R.

**Dorado Beach Resort** - Direct Push Technology (DPT) Injection Project of 43 injections of 4,200 lbs of Substrate (ORC/EHC-O), an accelerated aerobic bioremediation and oxidation technology, to remove existing petroleum hydrocarbons from the groundwater.

**Scotiabank de Puerto Rico** - Phase III Environmental Site Assessment (ESA) for GH Forest, Road PR 19, northeast of km. 5.1, Monacillos Ward, Guaynabo, P.R.

**General Investment Group -** In-Situ Chemical Oxidation of "Perozone" to soil and groundwater impacted with petroleum hydrocarbons from a leaking Above Storage Tank, Santurce, P.R.

**Golder Associates, Inc.** – Drilling, Installation of Monitoring Wells and Injection of amendment via direct injection at up to 24 permanent injection locations for groundwater impacted with VOC's at former Pharmaceutical Plant, Carolina, P.R.

**Capitol Environmental Services, Inc.** – In-Situ Chemical Oxidation of "Perozone" to soil and groundwater impacted with petroleum hydrocarbons, Margaritaville Wyndham Hotel, St. Thomas, V.I.



#### **BIOREMEDIATION PROJECTS**

**Puerto Rico National Guard (PRANG)**- Bioremediation, sampling, and monitoring of 1,000 cubic yards of contaminated soil with diesel from Underground Storage Tanks closure at Fort Allen, Juana Díaz, PR.

**Puerto Rico National Guard** - Bioremediation of 100 cubic yards of contaminated soil with diesel from Underground Storage Tanks closure at Puerto Rico National Guard , Mayaguez, PR.

**Caribbean Petroleum Gulf -** Bioremediation of 100 cyds of contaminated soil with diesel from Underground Storage Tanks closure, Peñuelas, PR

**US Department of the Navy-** Bioremediation, sampling and monitoring of contaminated soil with JP-5 at Aircraft Refueling Station, Roosevelt Roads, Ceiba, PR.

**US Department of the Navy -** Bioremediation, sampling and monitoring of 2,060 cubic yards of soil impacted with gasoline from Underground Storage Tanks, Roosevelt Roads, Ceiba, PR.

**US Department of the Navy** - Bioremediation, sampling and monitoring of contaminated soil with JP-5 at Roosevelt Roads Emergency Spill Response Station, Roosevelt Roads, Ceiba, PR.

**US Department of the Navy -** Bioremediation, sampling and monitoring of 35 cubic yards of soil contaminated with diesel from Underground Storage Tanks closure, U. S. Naval Station, Roosevelt Roads, Ceiba, PR.

**US Department of the Navy** -Bioremediation, sampling and monitoring of approximately 15 cubic yards of Non-PCB mineral oil from Electrical transmission at Camp García, Vieques, PR.

**US Department of the Navy** - Bioremediation, sampling and monitoring of approximately 18 cubic yards of contaminated soil with JP-5 at Tank Farm Area, Roosevelt Roads, Ceiba, PR.

**US Department of the Army** - Bioremediation, sampling and monitoring of approximately 5,000 cubic yards of contaminated soil with gasoline and diesel from Underground Storage Tanks closure at Fort Buchannan Guaynabo, PR

**Goverment Development Bank of Puerto Rico** - Bioremediation, sampling, and monitoring of approximately 1,500 cubic yards of hydrocarbon affected soil at future Government Development Bank facilities, Stop 26, Santurce, P.R.

**Puerto Rico Port Authority** - Bioremediation, sampling and monitoring of 15 cubic yards of contaminated soil with used oil at the Ferry Terminal, Cataño, PR.



#### **BIOREMEDIATION PROJECTS-CONTINUED**

**Cooperativa de Camioneros Transporte de Carga** - Bioremediation, sampling and monitoring of approximately 700 cubic yards of soil contaminated with diesel at Emergency Spill, Maunabo, PR.

**Right Way Environmental** - Bioremediation, sampling and monitoring of approximately 150 cubic yards of contaminated soil with hydrocarbon at Triple-S site, Puerto Nuevo, PR.

**Reliable Mechanical, Inc.** - Bioremediation, sampling and monitoring of approximately 10,000 gallons of contaminated water, sludge and 3,000 cubic yards of soil from Underground Storage Tanks closure.

**Almacenes Riviera/Ysiem Corp.** -Bioremediation, sampling and monitoring of approximately 500 cubic yards of contaminated soil and environmental restoration works at former Boricua Motors site, Carolina, PR.

**Eli Lilly Industries** - Sampling and bioremediation, sampling and monitoring of approximately 250 cubic yards of contaminated soils with hydrocarbon in various locations within Eli Lilly Facilities.

**Pedro Panzardi & Associates -** Bioremediation, sampling and monitoring of approximately 150 cubic yards of contaminated soil in Quality Metals, Toa Alta, PR.

**Environmental Consulting Group** -Bioremediation, sampling and monitoring of approximately 280 cubic yards of contaminated soil at El Coqui Waste facilities. Caguas, PR.

**Cooperativa de Camioneros -** Bioremediation, sampling, and monitoring of approximately 600 cubic yards of soil contaminated with diesel at Bayamón, PR.

**Caribco International/Puerto Rico Ports Authority** - Bioremediation, sampling, and monitoring of approximately 2,000 cubic yards of hydrocarbon affected soil at former US Ramey Air Force Base, Aguadilla, PR.

**Puerto Rico Ports Authority** - AVGAS spill cleanup and on-site bioremediation, sampling and monitoring of AVGAS contaminated soil of approximately 14,000 cu/yds. at "Rafael Hernandez" Airport, Aguadilla, PR.

**Prental, Inc.** - Soil bioremediation, sampling and monitoring of approximately 500 cu/yds of hydrocarbon contaminated soil at National Rental Car, Luis Muñoz Marín International Airport, Carolina, PR.

**Avis Car Rental** - Bioremediation, sampling, and monitoring of approximately 10,000 cubic yards of contaminated soils with Gasoline at Luis Muñoz Marín International Airport, Carolina, PR.



#### **ACM & LBP ABATEMENT PROJECTS**

**Top Construction Corporation** – Asbestos Material and Lead Based Paint Investigation at Former American College in Dorado, PR

**Citigroup, N.A.** – Lead Base Paint abatement from wheel stops, concrete curbs, steel beams, and stairs at Citibank's Building, Cupey, P.R.

**Puerto Rico Public Building Authority** – Performed asbestos and lead-based paint inspection and abatement supervision, including consulting services for the remodeling and reconstruction of seven (7) housing projects.

Former W.R. Grace, Guánica, PR – Performed the removal/abatement of 3,000 ft of ACM.

**Former Bilchem Pharmaceutical Facility, Ponce, PR** – Performed the removal/abatement of 54,000 Sq. ft of ACM.

**VAMC** (**Veterans Hospital**), **Río Piedras**, **PR** – Performed the removal/abatement of 35,000 Sq. ft of ACM.

**Puerto Rico Department of Education** – Inspected over 100 public schools under the AHERA program. Audited abatement contractor on several schools during removal activities.

**LMD Construction A Maintenance** – Removal Asbestos contained material (ACM) at Las Colinas Housing, Fort Buchanan, Guaynabo, PR.

**Picerne Development** – ACM & LBP Abatement for Jardines de Mayaguez Remodeling (Stripping & Segregation) of Thirteen (13) Buildings four-story high. Approx. 10,000 sf

**Puerto Rico Land Administration** – ACM & LBP Abatement for concrete debris from demolished housing building, Punta Las Marias, San Juan, P.R. P

**Pedro Panzardi & Associates (PP&A) -** Asbestos and lead based paint survey services for eight (8) Elderly Homes within several Municipalities in Puerto Rico.

**Del Valle Group, Inc.** – ACM Abatement for concrete debris from demolished housing building, Rio Piedras, P.R.

**Colón Construction Corporation -** Lead Base Paint abatement from concrete curbs at Municipality of Caguas, P.R.

**Cross Island Builders, LLC** – Kline Building, Crown Bay, St. Thomas, VI – Lead Base Paint abatement from concrete walls and recycling of structural steel.



#### **IN-SITU BIOREMEDIATION PROJECTS**

**La Finquita Service Station** - In-situ bioremediation, sampling, and monitoring of approximately 250 cubic yards of soil contaminated with gasoline at La Finquita Service Station, Las Piedras, PR.

**U. S. Army Reserve Command** - In-situ remediation of approximately 300 cubic yards of contaminated soil underneath concrete pavement in Fort Allen's facilities, Juana Diaz, PR.

**U. S. Army Reserve Command** - In-situ bioremediation, sampling, monitoring of approximately 500 cubic yards of contaminated soil, Fort Buchanan, Guaynabo, P.R.

**Elli Lilly Industries** - In-situ bioremediation, sampling, and monitoring of contaminated soil at PR 2 site Elli Lilly facilities, Carolina, PR.

**ENSR Environmental-** In-situ bioremediation, sampling, and monitoring of approximately 1,000 cubic yards of contaminated soil at former Puerto Rico Electric Power Authority facility in Condado, PR.

**Kent Meters, Inc.-** In-situ bioremediation, sampling, and monitoring of approximately 315 cubic yards of contaminated soil at Kent Meters, Inc., Isabela, PR.

**Municipality of Dorado** -In-situ bioremediation, sampling and monitoring of soil and groundwater contaminated with hydrocarbon at Public Works Workshop, Dorado, PR.

**University of Puerto Rico** - In-situ bioremediation, sampling, and monitoring of approximately cubic yards of soil and groundwater at Mechanical Workshop at University of Puerto Rico, Mayagüez Campus, Mayaguez, PR.

**Puerto Rico Industrial Development Co. (PRIDCO)** - In-situ soil bioremediation, sampling, and monitoring of approximately 675 cubic yards of hydrocarbon affected soil at Signal Caribe, Inc., Trujillo Alto, PR.

**First Environment** - In-situ soil bioremediation, sampling and monitoring of approximately 253 cubic yards of diesel fuel contaminated soil at Citibank Tower, Hato Rey, PR.

**Puerto Rico Telephone** – In-Situ Soil Bioremediation of hydrocarbon-impacted soil at Puerto Rico Telephone Sub-Station Mayaguez Mall, Mayaguez, P.R.

**Puerto Rico Electric Power Authority (PREPA)** – In-Situ Bioremediation of soil and groundwater through Oxygen Release Compound Injection at PREPA station, Vieques, P.R.



#### **IN-SITU BIOREMEDIATION PROJECTS-CONTINUED**

**Puerto Rico Public Building Authority** – In-situ bioremediation, sampling and monitoring of (approximately 20,000 cyds) petroleum hydrocarbon affected soil at Former AMA Terminal, Hato Rey, PR.

**Earth Tech, Inc., Davis & Geck**- In-situ bioremediation, sampling and monitoring of hydrocarbon affected soil and groundwater at Davis & Geck Pharmaceutical facility in Manatí, P.R.

Marina del Mar Shipyard - In-situ bioremediation, sampling and monitoring of diesel and gasoline contaminated soil from UST Spill at Marina del Mar Shipyard at Palmas Del Mar, Humacao, P.R.

**AMA / Anibal Díaz Construction -** In-situ bioremediation, sampling and monitoring, for hydrocarbon affected soil from Underground Storage Tanks Spill at AMA Terminal Site, Rio Piedras, P.R.

**Puerto Rico Electric Power Authority (PREPA)** - In-situ bioremediation, sampling and monitoring of approximately 1,000 cubic yards of hydrocarbon affected soil at PREPA, Ponce Hostos Power Station, Ponce, P.R.

**Puerto Rico Industrial Development Co.** – In-Situ bioremediation, sampling and monitoring of hydrocarbon (diesel) affected at Signal Caribe, Trujillo Alto, P.R.

**Puerto Rico Industrial Development Co.** – In-Situ bioremediation, sampling and monitoring of hydrocarbon affected soil at Hotel Barranquitas, Barranquitas, PR.

**Puerto Rico Electric Power Authority (PREPA)** – In-Situ soil and groundwater bioremediation and free product recovery (approximately 20,800 cyds ) of diesel contaminated soil at Hydro Gas Station, Vega Baja, PR

**Banco Popular de Puerto Rico** – In-Situ soil and ground water bioremediation for hydrocarbon affected soil and groundwater at Motor Pool Center, Cupey, P.R.

**Puerto Rico Industrial Development Co.** – In-Situ bioremediation, sampling and monitoring of hydrocarbon (diesel) affected at Microsoft Building, Humacao, P.R.

**Navarro Service Station** – In-Situ Bioremediaion of hydrocarbon (gasoline) affected soil and groundwater at Navarro Service Station, Gurabo, P.R.



# UNDERGROUND STORAGE TANKS (UST'S) AND ABOVE STORAGE TANKS (AST'S) PROJECTS

**Puerto Rico Ports Authority** - Removal of three (3) UST's and disposal of fuels. Bioremediation, sampling and monitoring of contaminated soil and groundwater at Ports Authority, Caño San Fernando, Cataño, PR.

**Puerto Rico Telephone Company (PRTC)** - UST substitution and clean up, bioremediation, sampling and monitoring of contaminated soil in PRTC facility at Bairoa, Caguas, PR.

**U. S. Department of the Navy** - UST's clean up and disposal at US Navy's Pico del Este facilities, Ceiba, PR.

**Las Piedras Construction and Puerto Rico Ports Authority** - Closure of UST's and bioremediation, sampling and monitoring of contaminated soils with Gasoline at Luis Muñoz Marín International Airport, Carolina, PR.

**Puerto Rico Ports Authority** - Closure of UST's and AST's in the Puerto Rico Ports Authority's facility in Arecibo, PR.

**U. S. Army Corps of Engineers** - Removal and disposal of underground storage tanks and ancillary equipment at former Dorado Auxiliary Airport, closure of 71 UST's and 4 AST's, and grouting of 10.5 miles of piping. U.S. Army Corps of Engineers Project # DACA-17-96-C-0039.

**U. S. Department of the Navy** - UST's closure in the US Naval Radio Transmitting facilities of Aguada and Isabela, PR.

**Puerto Rico Public Building Authority/PR Government Development Bank** - Closure of UST's and in-situ soil bioremediation, sampling and monitoring at former Metropolitan Bus Authority Terminal site, Hato Rey, PR.

**Puerto Rico Industrial Development Corporation** - Removal, disposal and closure in- situ of UST at various facilities of Puerto Rico Industrial Development Corporation (Fomento).

**Puerto Rico Government Development Bank** - Closure and corrective actions activities for Two (2) UST's of 5,000 gallons in Power Services Caribe, Inc., Cataño, PR.

**University of Puerto Rico Cayey Campus** – Closure Permits, Removal and Disposal, Sampling and Corrective Activities of two 10,000 gal. UST's at UPR Cayey Campus, Cayey, P.R.



# UNDERGROUND STORAGE TANKS (UST'S) AND ABOVE STORAGE TANKS (AST'S) PROJECTS-CONTINUED

**Puerto Rico Department of Transportation** - Closure of 34 UST'S and installation of 23 AST's at different facilities in the island of Puerto Rico.

**U. S. Army Reserve Command** - Closure of Underground Storage Tanks at Ramey Base, Aguadilla, PR.

**Municipality of Vega Baja** - Installation of Above Storage Tank for Gasoline at the Municipality of Vega Baja, PR.

- **U. S. Department of the Navy** Removal and closure of seven (7) UST's containing diesel and gasoline at U. S. Naval Station Roosevelt Roads, Ceiba, PR.
- **U. S. Department of the Navy/Caribco International** Closure of four (4) UST's at various U.S. Navy facilities in Puerto Rico.
- **IT Corporation/U. S. Army Corps of Engineers** Closure of two (2) UST's of 6,000 gallons at NASD, Vieques, PR.
- **U.S. Department of the Army** Removal and closure of various UST's and installation of new AST's. at U.S. Army Fort Buchanan, Guaynabo, PR.
- **U. S. Department of the Navy** Interior Cleanup, removal and disposal of sludge from 200,000 gallons, JP-5 storage tank located within the airport at Roosevelt Roads US Naval Station of Ceiba, PR.

**Avis Car Rental** - Closure and Removal of eight (8) Underground Storage Tanks at Luis Muñoz Marín International Airport, Carolina, PR.

**Prental, Inc.** - Closure of Underground Storage Tank at National Rental Car, Luis Muñoz Marín International Airport, Carolina, PR.

**Puerto Rico Government Development Bank** - Solid Wastes Sampling and Analysis at Power Services, Cataño, PR.

**Right Way Environmental, Inc.** UST Closure Plans & Permits Former Naval Air Station, San Juan, P.R.



#### **UNDERGROUND INJECTION CONTROL (SEPTIC TANKS) PROJECTS**

Kent Meters, Inc. - Closure and sampling of Septic Tank at Kent Meters, Inc., Isabela, PR.

**Municipality of Vega Baja** - Closure and sampling of Septic Tank at the Municipality of Vega Baja, PR.

**Calvary Baptist Tabernacle & Christian Ministries** – Design & Permits for New Sanitary Line & Closure of two Septic Tanks at facilities in Carolina, PR

**Puerto Rico Telephone (PRT)** – Closure of Septic Tank System and Installation of a New Retention Tank at PRT Guardarraya Facilities in Patillas, PR.

**Right Way Environmental Contractors, Inc. / US Department of the Navy** – Underground Injection System V-C (Septic Tanks), permits at US Navy, Camp Garcia in Vieques, PR

**University of Puerto Rico (UPR)** – preparation of sampling plan and perform sampling activities at eight (8) Underground Injection Systems at Isla Magueyes, UPR Mayaguez campus, and Agricultural Experimental Station, Isabela, P.R.



#### **RISK ASSESSMENT PROJECTS**

**Puerto Rico Housing Finance Authority** – Environmental and Human Health Risk Assessment on the existing arsenic affected soil at NHS Project, Usubal, Canóvanas, PR.

**Puerto Rico Telephone** (**PRT**) – Environmental and Human Health Risk Assessment on existing hydrocarbon affected soil at PRT Facilities in Moca, PR

**Puerto Rico Telephone** (**PRT**) – Environmental and Human Health Risk Assessment on existing hydrocarbon affected soil at PRT Facilities in Sabana Grande, PR.

**Commonwealth Oil Refining Company** (**CORCO**) – Tier 2 and Tier 3 Subsurface Vapor Intrusion Screening at CORCO's Administration Building, Peñuelas, P.R.

**Commonwealth Oil Refining Company (CORCO)** – Potential Receptor Evaluation for Mangrove Land Crabs in the Effluent Channel Area at CORCO, Peñuelas, P.R

#### **MOLD REMEDIATION AND ASSESSMENT**

**Sirenusa Condominium, St. John, USVI** - Mold assessment activities of 22 villas totaling 51,876-square feet and a 3,390-square foot clubhouse, at Sirenusa Condominium, St. John, USVI.

**University of Virgin Islands, St. Thomas, USVI** – Mold Removal, Cleaning and Sanitizing Application to eliminate Mold Growth Spores and Assessments of West Hall Building, President's Guest House, Quarter B Building and Reicholds Center, University of the Virgin Islands, St Thomas, USVI.

AIP Holdings, LLC - Mold Assessment 270 Plaza PH, 270 Muñoz Rivera Ave. Hato Rey, Puerto

**Sugar Bay Resort & Spa, St. Thomas, USVI** – Mold Remediation, Cleaning and Sanitizing Application to eliminate Mold Growth Spores in all Hotel rooms, Ballrooms, Administration Offices, Laundry Facilities, Amphitheater and Restaurants.

Virgin Islands Water & Power Authority (VI WAPA), St. Croix, USVI – Mold Remediation to eliminate Mold Growth and Spores and Assessment at VI WAPA Line Department and Sunny Isle Offices, St. Croix, USVI.

Law Office of John K. Dema, PC, St. Croix, USVI – Mold Removal and Remediation, General & Final Cleaning

VI Housing Authority – Estate Knolls Apartments, St. Thomas, USVI – Mold Remediation, Cleaning and Sanitizing to eliminate Mold Growth Spores in facility.

**VI Internal Revenue Bureau – Main Office, Red Hook, St. Thomas, USVI – Mold** Remediation to Sanitize, Disinfect and Eliminate Mold Growth and Spores.



#### **SPECIALTIES PROJECTS**

- **U. S. Army Reserve Command** Clean up and removal water with sludge from oil/water separator at various USAR Centers in Puerto Rico.
- **U. S. Army Reserve Command** Clean up and gas free certification of 10,000 gallons tankers at Fort Allen, Juana Díaz, PR.
- **U. S. Army Reserve Command** Indoor Air Quality Antilles Consolidated High School, Roosevelt Roads, Ceiba, PR.

**Puerto Rico National Guard (PRANG)**- Hazardous waste pick-up and proper disposal of drums at various PRANG locations in Puerto Rico.

**Geocom, Inc.** - Transportation and disposal of soil sampling from Underground Storage Tank, U. S. Veteran Administration Hospital, Río Piedras, PR.

**University of Puerto Rico, Mayaguez Campus -** Hydrogeologic Study at the University of Puerto Rico, Mayaguez Campus.

Kiewit-Kenny-Zachry (KKZ) - IAQ/Cleaning, A/C Vents at shop in Tren Urbano Project, Río Piedras, PR.

**Science Applications International Corporation**-Removal, Transportation and disposal of hazardous and non-regulated materials in the TSA Offices at Saint Thomas, Saint Croix and San Juan, PR. Airports.

**Puerto Rico Air National Guard (PRANG)**- Clean up and removal water with sludge from oil/water separator at various facilities Center in Puerto Rico.

**MWH AMERICAS, INC.** – Oil Water Separators Abandonment and Site Maintenance/Repairs at US Coast Guard Air Station Borinquen, Aguadilla, P.R.

Shaw Environmental, Inc.- Plan CES for Roosevelt Road NAPR Landfill, Ceiba, P.R.

**Right Way Environmental Contractors, Inc. / Cape Environmental** – Soil sampling and screening analyses for US Navy Remedial Action Soil Remediation at various sites at former Roosevelt Roads Naval Station, Ceiba, P.R.

V.A. Medical Center – Lab Testing For VA Hospital Addition VA Hospital, Rio Piedras, P.R.

Constructora Ingenio – Supervision & Closure of Dorado, Dorado Landfill, Dorado, P.R.

**Citibank**, **N.A.** – Indoor Air Quality Assessments & Air Sampling at various Citibank branches in Puerto Rico.

**Transystem Corporation** - Geotechnical Survey Planning Documents for the Reconstruction of USCG AIRSTA Borinquen, Aguadilla, Puerto Rico.



#### **SPECIALTIES PROJECTS - CONTINUED**

**AMEC Earth & Environmental, Inc.** – Utility Service Maps Location San Juan Waterfront Project, San Juan, P.R.

Construciones Jose Carro, S.E. – Environmental Permits such as Consolidadted General Permit (GCP), Stormwater Pollution Prevention Plan (SWPPP), Control, Erosion and Sedimentation (CES) Plan, Environmental Pollution Prevention Plan, Spill Control and Countermeasures Plan (SPCC) and Environmental Compliance Superintendent for the Construction Activities of Rio de la Plata Phase I Flood Damage Reduction Project. (USCOE project)

**Camp Dresser & Mc Kee, Inc. (CDM Federal)** – Professional & Technical Services Support, Cidra, Maunabo and Scorpio Superfund Sites, Puerto Rico.

**CH2MHILL, INC.** - Oversight support for the closure activities (RCRA units) at Pfizer Arecibo facility. A full time representative from the Puerto Rico licensed Engineer was provided for the oversight of the RCRA units dismantling and demolition activities to observe and document unit decontamination and waste management activities. Engineer-of-Record (EOR) Closure Certification that the facility has been closed in general accordance with the Final Revised RCRA Part B Closure Plan, as approved by the U.S. Environmental Protection Agency (EPA).

**CH2MHILL, INC.** - Oversight inspection for the closure activities of a Hazardous Waste Landfill and professional certification of the closure upon completion. Documentation of the construction was completed as designed and in accordance with the Closure Plan. Final certification with professional signature and seal (Professional Engineer in Puerto Rico) stating that the landfill has been closed in accordance with the specifications in the closure plan as approved by the U.S. Environmental Protection Agency (EPA).

**Microsoft Caribbean, Inc.** - In-door Air Quality and humidity investigation in concrete floors at Microsoft Caribbean, Inc. main offices at City View Plaza II Suite 107 State Road 165 Km 1.2, Guaynabo, PR

**Green Cay Marina, St. Croix, USVI** – Environmental Forensics Study: High precision lead isotope/concentration (Pb IC/ID) and high resolution gas chromatography (HRGC) analyses on groundwater was used to estimate of the year(s) gasoline releases occurred at the site.

**CH2MHILL, INC.** - Professional Engineer registered in the Commonwealth of Puerto Rico Closure Certification Services for the Engineer of Record (EOR) for the Clean Closure of the West Aeration Basin, Peñuelas Technology Park, LLC, Peñuelas, PR

**Aireko Construction Management Services, LLC – St. Croix, USVI -** Construction at the Gordon A. Finch Molasses Dock Marine Cargo Terminal, Krause Lagoon, Christiansted, St. Croix, VI-Provide and install turbidity barriers along the perimeter of all work areas to prevent the displacement of fill material or dredged material outside the work area and the provision of Maintenance and Monitoring Plan and Maintenance Schedule that curtains are functioning effectively and provide a contingency plan in case those curtains fail.



## **SPECIALTIES PROJECTS - CONTINUED**

**Weston Solutions, Inc.** – USPS Havensight MPO, St. Thomas, USVI, Facility Assessment, Cleanup and Reconstruction of Facilities on an Emergency Basis after Hurricane Irma.

**Weston Solutions, Inc.** – USPS Charlotte Amalie MPO, St. Thomas, USVI, Facility Assessment, Cleanup and Reconstruction of Facilities on an Emergency Basis after Hurricane Irma.

**Weston Solutions, Inc.** – USPS facility, St. John, USVI, Facility Assessment, Structural Evaluation and Cleanup on an Emergency Basis after Hurricane Irma.

**Weston Solutions, Inc.** – USPS St. Thomas, USVI, Sugar Estate Two Maintenance Rooms, Facility Assessment, Cleanup and Reconstruction of Facilities on an Emergency Basis after Hurricane Irma.

**Weston Solutions, Inc. -** USPS St. Thomas, USVI, East End Station Post Office, Facility Assessment, Cleanup and Reconstruction of Facilities on an Emergency Basis after Hurricane Irma.

**Weston Solutions, Inc.** – USPS St. Thomas, USVI, Emancipation Gardens Post Office, Facility Assessment, Cleanup and Reconstruction of Facilities on an Emergency Basis after Hurricane Irma.

Weston Solutions, Inc. – USPS St. Thomas, USVI, Veterans Annex Post Office,

Facility Assessment, Cleanup and Reconstruction of facilities on an Emergency Basis after Hurricane Irma.

**Weston Solutions, Inc.** – USPS Toa Alta and Carolina, Puerto Rico, Post Offices, Structural Engineering Assessment on an Emergency Basis after Hurricane Maria.

**Weston Solutions, Inc.** – USPS San Juan, Puerto Rico MPO, Facility Assessment on an Emergency Basis after Hurricane Maria.

**Weston Solutions, Inc.** – USPS Aguada, Aguadilla, Arecibo Pueblo and Moca, Puerto Rico, Post Offices, Facility and Structural Assessment on an Emergency Basis after Hurricane Maria.

**Weston Solutions, Inc.** – USPS Ponce Atocha Post Office, Facility and Structural Assessment on an Emergency Basis after Hurricane Maria.



#### EPA, REGION 2 OVERSIGHT AND PILOT STUDY PROJECTS

**Weston Solutions, Inc.-** EPA - Function is to properly collect samples, collect data, participate in field activities, analyze samples in the field, perform calculations, organize results, keep work areas in order, and maintain equipment.

**Puerto Rico Land Authority** - Remedial Action in NPL required by the EPA for the removal and disposal of hazardous and non hazardous waste stored on the Pesticide Warehouse located in Palo Alto, Manati, PR.EPA ID: PRD987367299

**Puerto Rico Land Authority** - Remedial Action Plan and corrective action activities at Buffalo Warehouse in Arecibo, PR. **EPA ID: PRD987367349** 

**Puerto Rico Land Authority** - Remedial Action Plan and corrective action activities at Walcott Warehouse in Arecibo, PR. **EPA ID: PRD987367356** 

**CDM-Smith** - Field Oversight at the Pesticide Warehouse III OU2 Groundwater Site in Manati, Puerto Rico.

**CDM-Smith** - Field Investigation Oversight for drilling, sampling collection, and documentation for San German Groundwater Contamination Superfund Site, San German, P.R.

**CDM-Smith** - Field Investigation Oversight for drilling, sampling collection, and documentation for Cabo Rojo Groundwater Contamination Superfund Site, Cabo Rojo, P.R.

**CDM-Smith** - - Field Investigation Oversight for drilling, sampling collection, and documentation for Corozal Well Superfund Site, Corozal, P.R.

**CDM-Smith** - Field Investigation Oversight for drilling, sampling collection, and documentation for Cidra Groundwater Contamination Superfund Site, Cidra, P.R.

**CDM-Smith** - Field Investigation Oversight for drilling, sampling collection, and documentation for Papelera Puertorriqueña Site, Utuado, P.R.

**CDM-Smith** - Field Investigation Oversight for drilling, sampling collection, and documentation for Maunabo Groundwater Contamination Superfund Site, Maunabo, P.R.

**CDM-Smith** - Field Investigation Oversight for drilling, sampling collection, and documentation for Hormigas Groundwater Contamination Superfund Site, Caguas, P.R.

**CDM-Smith** - Field Investigation Oversight for drilling, sampling collection, and documentation for Cabo Rojo Groundwater Contamination Superfund Site, Cabo Rojo, P.R.



## **EPA, REGION 2 OVERSIGHT AND PILOT STUDY PROJECTS - CONTINUED**

**CDM-Smith-** Field Execution of Air Sparging Pilot Study for Maunabo Groundwater Contamination Superfund Site, Maunabo, P.R.

**CDM-Smith**- Field Oversight for Remediation Activities of Vega Baja Solid Waste Disposal Site, Vega Baja, P.R.