REQUEST FOR QUALIFICATIONS NO. 14-004: ENVIRONMENTAL ENGINEERING SERVICES

JULY 9, 2014

Submitted to

City Clerk
City of Key West
3126 Flagler Ave.
Key West, FL 33040

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CITY OF KEY WEST

REQUEST FOR QUALIFICATIONS NO. 14-004

ENVIRONMENTAL ENGINEERING SERVICES

1.0 INTRODUCTION

Bureau Veritas North America, Inc. (Bureau Veritas) is pleased to present this statement of qualifications to the City of Key West (CITY) for Environmental Engineering Services. It is our understanding that Key West requires the services of a qualified firm(s) to provide Environmental Engineering Services. The services may include but are not limited to site investigation, remedial services planning services, design services, permitting assistance, bid and proposal development services and services during construction / remediation.

As per the Request for Qualifications (RFQ), this submittal will illustrate the qualifications and experience of Bureau Veritas and our team members, Coastal Systems International, Inc. and Sandra Walters Consultants, Inc.

Bureau Veritas employees and team members have performed the services needed by the CITY for similar programs such as:

- City of Key West
- Miami Dade County
- Broward County
- City of Miami
- City of Pompano Beach
- City of Sunrise

This submittal will demonstrate:

- Specialized experience and technical competence of the team in the RFQ listed disciplines.
- Professional qualifications and certifications of staff personnel / Capacity of assigned and identified staff to accomplish work.
- Past work experience.
- Ability to perform the services expeditiously at the request of the CITY. Location and availability of technical support people and assigned project manager to the CITY.
- Other Certificates which include Bureau Veritas' certified ISO 9001:2008 quality management system.

1.1 About Bureau Veritas

Bureau Veritas is a global leader in conformity assessment and certification services in the areas of quality, health and safety, environment and social responsibility. With more than 2,400 QHSE professionals in over 80 offices across North America, Bureau Veritas develops solutions that contribute to risk prevention and performance improvement to help organizations create long-term value through our technical, regulatory, and management system expertise. Bureau Veritas has the flexibility to select from a nationwide group of specialists in all major HSE disciplines. Multi-site project responsibility can be directed through a single point of contact to streamline communication and project scheduling, and control costs. We have field consultants strategically located throughout most of the 50 states to support our regional HSE office locations, and currently provide HSE services throughout the state of Florida with office locations in Tampa, Miami, Fort Lauderdale, and Fort Myers. For the services requested by the CITY in this RFQ, Bureau Veritas will staff and manage the program from our operations in Miami, Florida. To learn more about all the health, safety and environmental services we provide, please visit www.us.bureauveritas.com, or contact us at usinfo@us.bureauveritas.com.

Recently, Bureau Veritas has performed work in the Keys which includes voluntary assistance to Habitat for Humanity for the remediation of Baltuff Dump on Middle Torch Key, which is a Brownfield site.

1.2 About Bureau Veritas Team Members

For the services in this request, Bureau Veritas has assembled a team of in-house and subcontracted resources to fulfill all of the CITY's requirements. Our team is composed of Bureau Veritas as the Prime Consultant and subcontractors (Team Members) selected to meet the managerial and technical requirements under the contract. All subcontractors go through a thorough review of their financial records, insurance and safety records to become a Bureau Veritas approved vendor. Bureau Veritas performs audits to ensure they maintain our high standards. Team Members will be managed to Bureau Veritas standards for service excellence and quality standards. As part of our ISO 9001:2008 certified quality management system (QMS), our Project Core Model (PCM) enables the management of subcontractors to our levels of service, safety and quality.

In addition to the team members outlined in this submittal, Bureau Veritas maintains relationships with subcontractors to perform strategic services such as surveying, drilling, geophysics, and others. These relationships include Small, Disadvantaged Business Entities (SDBE). Bureau Veritas has the capability to track SDBE involvement for particular contracts and has a long-standing record of exceeding SDBE performance goals. For example, Bureau Veritas has exceeded SDBE performance metrics on our contract with the Metropolitan Atlanta Rapid Transit Authority. Bureau Veritas has held this contract for over 19 years.

Bureau Veritas will seek out relationships with certified disadvantaged business enterprises (DBE) with the State of Florida for as needed support with the environmental engineering services for City of Key West.

1.2.1 COASTAL SYSTEMS INTERNATIONAL, INC.

Coastal Systems International, Inc. (Coastal Systems) located in Coral Gables, Florida has an established reputation for providing solutions to complex projects in the coastal/waterfront environment. For over 20 years, Coastal Systems have helped clients realize their vision by engineering cost-effective solutions in the design of marinas, beaches, offshore/nearshore coastal structures and private island destinations.

Coastal Systems have amassed significant experience in managing projects throughout Florida, the Caribbean and the Americas. From initial field investigations including hydrographic surveying and marine resource assessments through permitting, design and construction, we provide clients with a field-to-finish solution.

Coastal Systems will support the coastal engineering aspects of this contract including: full-scale engineering, design, surveying, permit preparation, preparing contract specifications, preparing bid and proposal documents. Which includes assisting the City with technical review and ranking of the same to attain qualified contractors for work, environmental assessments, construction administration and owner project representation services relating to operation, new construction, permit modification, construction improvements, rehabilitation and or retrofit of Coastal Facilities including but not limited to docks, marinas, seawalls, bridges, erosion control, beach design and beach re-nourishment.

A list of Public Sector Clients Includes:

Miami-Dade County	Broward County
Palm Beach County	Martin County
City of Miami Beach	City of Miami
Village of Key Biscayne	Village of Bal Harbour
City of Sunny Isles	City of Hollywood
City of Hallandale Beach	Town of Hillsboro Beach
Hillsboro Inlet District	Town of Palm Beach
Florida DEP State Parks	US Virgin Islands PFA

1.2.1 SANDRA WALTERS CONSULTANTS, INC.

Sandra Walters Consultants, Inc. (SWC) located in Key West, Florida provides services in all areas of ecological and environmental consulting and land use and public facilities planning and permitting, including habitat assessments, wetland permitting and mitigation design, environmental impact statements, compliance monitoring, development agreements, and submerged land leases. SWC is also fully trained in utilization of State and federal wetland assessment methodologies.

SWC has extensive experience working with agencies to develop project designs that minimize impacts and meet permitting requirements, and to bring clients into compliance with regulatory standards. The firm has conducted data collection and analysis, and written environmental and planning sections of NEPA documents for FDOT, the FAA, the South Florida Water Management District, and U.S. Army Corps of Engineers, and also provides construction environmental compliance monitoring services.

SWC provides a range of services in contamination assessment, including conducting Phase I and II environmental site assessments, soil and groundwater testing and reporting, underground storage tank removals, and acquisition of No Further Action determinations from the Florida Department of Environmental Protection.

The principal of the firm, Sandra Walters, has more than 30 years professional experience. She presently serves on and is a former chair of the South Florida Regional Planning Council, appointed by governors Bush, and Crist and Scott; and served a four-year term as a Governor's appointee on Florida's Acquisition and Restoration Council, which oversees purchase and management of State conservation lands.

With an office in Key West, SWC will provide local presence and infrastructure for the team to serve the CITY during this contract. SWC will support the local permitting, Phase I and Phase II Environmental Site Assessments (ESA) and contamination assessments for this contract.

A list of Public Sector Clients Includes:

City of Key West	City of Marathon
Federal Aviation Authority	Fort Lauderdale-Hollywood International Airport
South Florida Water Management District	Broward County
U.S. Army Corps of Engineers	City of Naples
U.S. Navy	U.S. Postal Service
Town of Medley	City of Bonita Springs

1.3 WHY CHOOSE THE BUREAU VERITAS TEAM

Bureau Veritas has assembled a team that offers the best value to the CITY for this scope of services. Our proven and dedicated team of Quality, Health & Safety, Environment and Social Accountability (QHSE) professionals brings the right philosophy and longstanding experience to the CITY:

- A complete team that brings experience and technical expertise in the disciplines needed for this contract.
- A staff of Florida-based personnel well-versed with Florida Department of Environmental Protection (FDEP) programs and performing similar work for other Florida Public Sector clients.
- A team with locally-based office and personnel to perform services in a timely fashion.
- Trained employees who strictly adhere to "Code of Ethics" which emphasizes confidentiality, integrity and compliance.
- Established and certified quality management program allowing projects to be executed consistently with a high level of customer service.
- Aligned core values with a commitment to providing a safe and secure workplace for our employees and our clients. Absolute Safety – My Choice – The Right Choice™.
- The BVNA Experience Modification Rate (EMR) and Total Incident Case Rate (TICR) are both below 1 for the last three years.
- Conditions change and "Continuous Improvement" is critical. Our front-line professionals are supported by a quality program driven by our commitment to excellence and our ISO 9001:2008 Certification and North American Management System (NAMS) peer review process.

We simply offer our best resources with complete corporate-level engagement.

2.0 QUALIFICATIONS AND EXPERIENCE

This section outlines the Bureau Veritas Team's qualifications and experience for performing the technical disciplines outlined in the CITY's Request for Qualifications. Embedded in each section are referenced projects highlighting the team's experience with each discipline. Wherever possible, the Bureau Veritas team has highlighted experience with Public Sector clients in the State of Florida.

2.1 CONTAMINATED SITE INVESTIGATION AND REMEDIATION SERVICES

When environmental conditions are identified during an initial site assessment, Bureau Veritas tailors future investigations to determine whether contamination exists and the extent of contamination. To determine where environmental impacts may exist, Bureau Veritas examines the past uses of the property during site history reviews. This is part of our initial assessment planning and strategy.

Bureau Veritas provides a full spectrum of Phase II Assessment and Investigation services to evaluate potential environmental impacts associated with soil, surface water, sediment, groundwater, or building structures. When identified, Bureau Veritas provides cost estimates for further investigation or remediation, and estimated schedules for their completion.
Our Phase II Assessment services include:

- Field screening and sampling
- Site characterization – using hand sampling, direct push, hollow stem drilling, mud rotary drilling, rock coring, air rotary drilling, horizontal drilling, Membrane Interface Probe (MIP), Laser Induced Fluorescence (LIF), temporary and permanent soil gas probes
- Remedial investigation – soil, groundwater, soil gas to evaluate vapor intrusion into buildings, sediment, surface water, building materials
- Site Investigation Summary Reports (SISR)
- Hydrogeological investigations
- Corrective Action Plan
- Remediation progress reports
- Remedial optimization studies
- Feasibility studies
- Risk assessment
- Underground injection permitting
- Wetlands delineation and mitigation
- Well installation, sampling and abandonment
- Fate and transport modeling

Source Removal, Former Flagler Railroad UST/Children's Courthouse Miami, Florida

Bureau Veritas conducted source removal of Bunker-C fuel contaminated soil at the future location of the Children's Courthouse in downtown Miami, Florida under contract with Miami-Dade County and on behalf of the Miami-Dade County General Services

The Bureau Veritas Team has the ability to conduct site investigations in a variety of conditions and locations including within surface water bodies to evaluate sediment and surface water impacts, inside of buildings utilizing hand methods, direct push, various drilling methods including low overhead locations or work during off hours. Our team of scientists and geologists has worked in a variety of conditions and

locations with the demonstrated ability to manage and overcome obstacles and difficult conditions to collect data needed safely to complete the tasks at hand.

Bureau Veritas' professionals assess remedial options thoroughly to select the most cost-effective and efficient solutions for our clients, often significantly reducing clean-up costs and timeframes.

Bureau Veritas has proven capabilities to design and implement turnkey remediation programs at sites nationwide. We assess feasible remedial options thoroughly to select the most cost-effective and efficient solution for our clients.

Soil Management Plan Preparation, Miami Museum Park

Bureau Veritas completed a Soil Management Plan addressing the means and methods for handling contaminated soil during conversion of waterfront Bicentennial Park into Museum Park. Bureau Veritas worked with Coastal Systems and the park architect to integrate soil remediation into park construction. The estimated cost to incorporate soil management into construction was $500,000 versus the previous $2 million estimate for remediation.

Our remediation services include:

- Risk based closure
- Decontamination and Demolition
- Remedial Option analysis including cost estimating
- Permitting
- Engineering and Design
- Construction including Resident Project Representative (RPR) services during construction
- Brownfield Redevelopment HSE Oversight
- Operation and maintenance
- Regulatory interaction and coordination

Our remediation experts design and implement cost-effective solutions based on site-specific considerations. With our network of subconsultants and vendors we leverage our buying power to provide a "best price" to our clients. The remediation systems not only have to be cost effective but have to be designed to stay operational throughout the duration of the remediation. We have successfully designed, installed, and operated remedial programs using the following technologies:

- Electrical Resistive Heating (ERH)
- Air Sparging
- Bioremediation
- Injections to treat petroleum and hazardous materials
- Soil vapor mitigations systems for buildings
- Slurry Wall Construction
- Permeable Reactive Barrier (PRB) walls
- Free Product Recovery
- Ex-situ Thermal Treatment
- Soil Vapor Extraction (SVE)
- Dual Phase Extraction (DPE)
- Air Stripping
- Carbon Adsorption
- Metal Stabilization

- Metals Precipitation

Bureau Veritas' field remediation group has successfully completed a wide range of construction-related projects, including remediation of the following contaminants in soil and groundwater:

Construction Related Projects	Contaminants Remediated
➢ Subsurface installations	➢ Chlorinated and non-chlorinated solvents
➢ Piping	➢ Heavy metals (Hexavelant Chromium, Vanadimum, Mercury)
➢ Structural concrete and steel	➢ Petroleum hydrocarbons
➢ Component integration	➢ Radioactive wastes
➢ Monitoring systems	➢ PCBs
➢ Site Closure and Restoration	

Past work Experience for the Bureau Veritas Team

Client Name	Habitat for Humanity of Key West and the Lower Keys	ClubCorp USA, Inc.	City of Miami
Project Name and Location	Baltuff Dump, Middle Torch Key, FL	Inverrary Maintenance Area, Lauderhill, FL	Bicentennial Park (now Museum Park), Miami, FL
Project Description	Brownfields assessment and remediation	Groundwater remediation for arsenic	Site Assessment and Soil Management Plan preparation
Dates Project Start/End Dates	2009 to present	2012 to present	2009 to 2010
Client Contact Name /Phone	Gary Walwer (305) 522-4401	Patricia Jones (972) 888-7588	Harry James (305) 416-1468
Client Address	30320 Overseas Hwy. Big Pine Key, FL 33043 (305) 872-4456	3030 LBJ Freeway, Suite 600, Dallas, TX 75234	444 SW 2nd Avenue, 10th Floor Miami, FL 33130
Key Personnel	Janet Peterson	Tim Tedesco	Scott Johnston Tim Blankenship
Engineering Services Fee	Volunteer basis	$25,000	$90,000
Estimated Construction Cost	TBD	$750,000	Original design not constructed

2.2 Industrial Hygiene Services

Bureau Veritas is well-qualified to deliver on the Industrial Hygiene scope of work services with in-house staff. Our Certified Industrial Hygienists, Industrial Hygienists, Asbestos and Lead Inspectors including our AIHA accredited laboratory bring substantial capabilities to the CITY to perform: industrial monitoring, health and safety compliance, laboratory compliance, and asbestos and lead-based paint management services.

For over 50 years, Bureau Veritas has been evaluating occupational hazards, delivering sound, reliable solutions to make workers – and workplaces – safer and healthier. Through a strong understanding of the relationship between works, equipment, processes, and potential sources of exposure we help clients anticipate, recognize, evaluate, and control workplace health hazards. Our highly-skilled and dedicated IH professionals help governments and businesses achieve compliance with federal, state, and local occupational health regulations.

Since 2009, *Business Insurance* has ranked BVNA the largest independent safety consulting firm in North America.

Bureau Veritas leverages our expertise in OSHA, ANSI, and other industry standards to evaluate existing IH procedures, policies, and programs – developing relevant recommendations that reduce redundancies, speed projects, and reduce costs. Bureau Veritas also develops long-term strategies to assure continuous compliance, improve processes, and support best management practices.
We can quickly pinpoint and deliver practical, client-specific solutions for a healthier workplace. Bureau Veritas provides effective solutions to both immediate and long-term IH issues.

Bureau Veritas offers incomparable resources and expertise with Industrial Hygiene services:

- More than 30 Certified Industrial Hygienists on staff.
- More than 110 professional Industrial Hygienists on staff.
- Bureau Veritas operates a full service AIHA accredited industrial hygiene laboratory saving clients money on mark-up fees.
- Our laboratories received their first accreditation at the inception of the AIHA program, 35 years ago and we are the contract laboratory for National Institute for Occupational Safety and health (NIOSH) since 2005.
- George Clayton, the founder of Clayton Group Services acquired by Bureau Veritas, is considered by many to be the “Father of Air Pollution Investigations” and wrote the “History of Industrial Hygiene.”
- Three practicing AIHA Fellows on staff (Lisa Barnes, CIH, PE; Donna Heidel, CIH; Robert Lieckfield, CIH).
- Dedicated Bureau Veritas Industrial Hygiene Practice Leader, Donna Heidel, CIH received the 2012 AIHA Presidents Award for her leadership of the Prevention through Design National Initiatives and her contributions to expand the practice of industrial hygiene to include chemicals without authorities occupational exposure limits (OELs).

Past work Experience for the Bureau Veritas Team

Client Name	Miami-Dade County	Miami-Dade College	NextEra/FPL
Project Name and Location	Various, Miami-Dade County	Various campus locations, Miami-Dade County	Various FPL facilities throughout Florida
Project Description	Asbestos Surveys and Indoor Air Quality Investigations	Asbestos Surveys and Indoor Air Quality Investigations	Indoor Air Quality Investigations
Project Start/End Dates	2008 to present	2008 to present	2009 - present
Client Contact Name/ Phone	Jose Tovar (786) 552-8575	Eneida Perez-Mendez (305) 237-0576	Larry Wylie (561) 694-4073
Client Address	WASD 3071 SW 38th Avenue Miami, FL 33146	11011 SW 104 St. Bldg L, Ste 118 Miami, FL 33176	NextEra Energy/FPL 700 Universe Boulevard Juno Beach, FL 33408
Key Personnel	Robert Lea (FLAC) Sergio Adasme (FL Mold Insp)	Robert Lea (FLAC) Sergio Adasme (FL Mold Insp)	Betty Harris (CIH) Brad Gilbert (CIH)
Estimated Fee to Date	$100,000	$100,000	$300,000+

2.3 Underground Storage Tank Site Services

The proper management of underground storage tank (UST) systems is an important concern for many commercial and industrial facilities. Poorly managed USTs can result in regulatory liability and negative financial impacts.

Naval Air Station, Key West
Bureau Veritas prepared a Tank Closure Assessment Report for the NAS, Key West. The draft report was well received. "I'm well satisfied this is a solid and well construction TCAR which will enable us to receive a NFA from FDEP." – NAVFAC SE Contact.

Ensuring compliance with current regulations is a vital element of UST management. During UST compliance evaluations, Bureau Veritas identifies compliance deficiencies before regulatory orders and fines are issued. If UST repair and maintenance services are required, Bureau Veritas can be a sole-source provider to manage the correction of the noted deficiencies. Bureau Veritas can manage any type of UST deficiency issue from pressure testing, system component repair, record

keeping, and training. We can also provide complete component or complete replacement of a UST or AST system with our network of preapproved Subconsultants.

Bureau Veritas provides certified professionals to ensure that the UST systems are functioning properly and in compliance with applicable requirements.

Bureau Veritas' capabilities include UST system design, installation, and upgrading to meet client specific requirements as well as federal, state, and local regulations. Client-specific considerations may include facility processes, material compatibility, system operation, or physical site conditions.

United States Postal Service (USPS)

The USPS retained Bureau Veritas to provide UST inspections for seven USPS vehicle maintenance facilities through-out Ohio. Each UST inspection included the following elements:

- Visual inspection, including sumps and fill ports, to identify malfunctions or deficiencies
- Photographic documentation
- Detailed written reports of findings

Bureau Veritas provided certified contractors to replace sump boxes, overfill alarms, and emergency shut-off equipment, and to repair electronic leak detection equipment, leaking dispensing units, and leaking product delivery lines. BVNA also provided two seminars and training manuals to ensure proper facility-level training to support future compliance.

For UST closure projects, Bureau Veritas evaluates the most cost-effective and practical methods, from closure-in-place to tank removal. Bureau Veritas oversees more than 100 UST removals each year.

Where releases have occurred, Bureau Veritas provides a wide array of investigative and remedial techniques to assist owner/ operators in obtaining "No Further Action" status from the appropriate regulatory agency.

Finally, Bureau Veritas provides UST operational training covering leak detection, spill protection, overfill protection, and corrosion protection.

If your sites have on-going remediation related to UST releases the Bureau Veritas team can continue to O&M current remediation systems as well as evaluate performance. Our Bureau Veritas team has managed 1,000s of UST removals and remediation efforts and prepared the required closure reports. We know how to efficiently clean up your sites and get them closed. The selected Bureau Veritas team has managed State and private company UST contracts responsible for all aspects of compliance, site investigation, and remediation in Florida and across the Country.

Bureau Veritas' Scott Johnston, UST Leader for this team, is thoroughly experienced with the Florida Department of Environmental Protection (FDEP) Petroleum Preapproval Program and the Storage Tank Compliance Section of the Permitting and Compliance Assistance Program.

Past work Experience for the Bureau Veritas Team

Client Name	Naval Facilities Engineering Command SE	Fountain Engineering	Miami-Dade County
Project Name and Location	Trumbo Point, NAS Key West	Marathon Force Main Project, 57478-59740 Overseas Hwy, Marathon, FL	Children's Courthouse, Miami, FL
Project Description	UST Closure Assessment	UST Excavation Oversight	Source removal associated with Flagler RR UST
Project Start/End Dates	2009	2011	2008-2010
Client Contact Name / Phone	Robert Courtright (305) 293-2881	Gregory Hoch (305) 517-6265	Humberto Contreras (305) 375-3956
Client Address	NAVFAC-SE NAS Key West	21050 SW 172 Ave Miami, FL 33187	DERM 701 NW 1st Ct, St 800 Miami, FL 33136
Key Personnel	Scott Johnston	Scott Johnston	Scott Johnston
Engineering Services Fee	$6,845	$5,470	NA
Estimated Construction Cost	NA	NA	$153,050

2.4 Real Estate Development Support Services

Bureau Veritas understands that performing environmental due diligence and delivering timely and accurate documentation helps owners, purchasers, and developers assess financial and regulatory risks related to a property transaction. Effective environmental services are the basis for well informed decisions regarding purchase, remediation, or legal action.

To protect against potential litigation and remediation costs associated with environmental issues, financial institutions and corporations require environmental information before making a financial commitment. Due diligence is the investor's process of investigating the details of a potential investment, such as examining operations and maintenance (O&M) procedures and verifying material facts.

In terms of real estate environmental due diligence, environmental site assessments (usually Phase I ESAs and Phase II ESAs) are the most common tools for evaluating site history and potential environmental liability. Properly conducted assessments enable corporate managers, borrowers, investors, and lenders to fulfill due diligence requirements for all types of properties before purchase, sale, development, refinancing, or foreclosure. Proper management of environmental issues can add considerable value to buildings and properties by providing documentation of remediation efforts and proper O&M procedures. Building owners and property managers also face environmental issues associated with ongoing operations of facilities. Day-to-day operations, tenant improvements, renovations, and building demolition all require investigation and sampling of various building materials. If active remediation is occurring at a site we can perform O&M activities and prepare remediation progress reports for the client and regulatory agencies.

Typical real estate transfer support services include:

- Environmental Assessments
- Asbestos and Lead Management
- Indoor Environmental Quality
- Microbial Assessment and Remediation
- Facility Water Management
- Underground Storage Tank Management
- Compliance Services
- Facility Decommissioning and Redevelopment
- Geographic Information Systems and Data
- Management
- Remediation Services

Because any combination of these services may be part of a client's due diligence or compliance effort, each Bureau Veritas project manager has full access to Bureau Veritas' nationwide group of environmental, health, and safety professionals.

Bureau Veritas is committed to technical excellence and encourages professional development and participation in professional organizations including the National Association of Industrial and Office Properties (NAIOP), the International Council of Shopping Centers (ICSC), the Urban Land Institute (ULI), the Building Owners and Managers Association (BOMA), the American Industrial Hygiene Association (AIHA), the American Society of Safety Engineers (ASSE), and the American Conference of Governmental Industrial Hygienists (ACGIH).

In conjunction with property due diligence services, Bureau Veritas can assist the CITY with taking a contaminated property through a Brownfields cleanup in order to gain significant financial and public image advantages. Florida's Brownfields Redevelopment Program provides liability protection for those parties wishing to purchase, clean up and redevelop Brownfield properties. By conducting assessment and remediation under a Brownfield Site Rehabilitation Agreement (BSRA), qualifying property owners or prospective purchasers of Brownfields properties are provided protection against liability for any future cleanup of the same contamination. Additionally, the limitation of liability relieves the new owner of liability for third party claims arising from the release. Florida provides tax incentives for Brownfields cleanup costs and job creation bonuses. Bureau Veritas' team is well versed in the Florida Brownfields

program and we have assisted numerous clients through this process in order to gain the benefits of property redevelopment under a BSRA.

Past work Experience for the Bureau Veritas Team

Client Name	ZOM Florida	PNC Bank	Treasure Coast Regional Planning Council	Monroe County Marine Resources Department
Project Name and Location	Palm Aire Redevelopment Phase 1, Pompano Beach, FL	Various throughout Florida and SE US	Former Pike Utility Property, Lake Worth, FL	Key West Mooring Field Pilot Project, Key West
Project Description	Soil assessment and soil management for golf course redevelopment	Phase I and Phase 2 ESAs	Brownfield assessment and source removal	One-year study of moored vessels
Project Start/End Dates	2013 - present	2004 - present	2011-2012	2013 - present
Client Contact Name /Phone	Kyle Clayton (954) 779-7950	Steve Katzenstein (216) 222-0112	Greg Vaday (772) 221-4060	Mr. Rich Jones (305)289-2805 Jones-Rich@MonroeCounty-FL.Gov
Client Address	200 E. Broward Blvd., Ste. 1200 Ft Lauderdale, FL 33301	1900 E 9th St. Cleveland, OH 44114	421 SW Camden Ave. Stuart, FL 34994	2798 Overseas Highway, Suite 420, Marathon, FL 33050
Key Personnel	Janet Peterson Tim Tedesco Ken Brooke	Bureau Veritas SE Area staff	Janet Peterson Scott Johnston	Shelli Tallacksen Sandy Walters
Engineering Services Fee	$22,000	$1,000,000+	$100,000	$22,039.80
Estimated Construction Cost	$100,000 (Bureau Veritas oversight)	NA	$103,400	NA

2.5 COASTAL ENGINEERING

Bureau Veritas team member Coastal Systems will be handling the Coastal Engineering scope of work elements for this project. Coastal Systems will be managed by Bureau Veritas and will perform services within the parameters of our certified quality management system to ensure consistent project execution and service excellence.

Coastal Systems has worked with many public clients to enhance access to waterfront areas and the public experience in these special environments. These include shoreline stabilization and beautification projects using structural and vegetated design solutions, pedestrian trails and transportation connections, public piers and viewing platforms and kayak launch areas. Special considerations are given to preservation of natural, historic, and cultural resources when appropriate, as well as providing amenities for a variety of user groups such as water-based site approaches for mariners, users with disabilities, youth, and senior citizens.

Current Coastal Systems' staff has secured permits as consultants or issued permits in their prior roles as County, State, and Federal agency regulatory staff for over 200 marina, mooring field, pier, and other waterfront improvement projects. Key staff co-authored the Manual 50, Planning and Design Guidelines for Small Craft Harbors published in 2012 by the Coasts, Oceans, Ports and Rivers Institute (COPRI) of the American Society of Civil Engineers (ASCE).

Coastal Systems has nearly unprecedented experience completing baseline technical studies including collection of hydrographic and biological data, conducting public meetings, conceptual design alternatives analysis and feasibility studies, and upland investigations, as well as the corresponding engineering analysis necessary to site, design and construction of waterfront and coastal projects.

Local Knowledge and Experience

Coastal Systems has extensive experience providing engineering and permitting services for public and private projects in Monroe County. These projects include beaches, marinas, piers, bulkheads, and environmental resource mapping. The location of the company in Miami-Dade County is ideal to service this area. Many employees spend weekends in the Florida Keys engaged in boating and other recreational activities, in addition to our business engagements in Monroe County.

Waterfront experience in the Key Largo area includes the following:

Mariners Club – above/below water investigation of dry storage forklift launching area and preparation of alternatives analysis to upgrade facility for larger capacity forklift.

Mariners Club Phase 2 – above/below water investigation of existing Mandalay Marina; hydrographic survey of basin and entrance channel.

Key Largo Harbor Marina - above/below water investigation of existing bulkhead and travelift piers. Evaluated structural options for retrofit and expansion of Travelift Piers

Postcard Inn – above/below water investigation of marina and shoreline

Waterfront experience in City of Marathon includes the following projects:

Maranu Luxe Bungalowe Resort and Spa redevelopment – shoreline assessment, marine resource mapping, hydrographic survey of existing Knights Key facility for marina redevelopment study. Coastal engineering analysis for foundation design of new structures.

Boot Key and Faro Blanco Marinas - marine resource mapping and hydrographic survey of existing marina for environmental permitting and planning of marina redevelopment into approximately 84 dry slips and 159 wet slips for both ocean and bay side facilities.

Additional waterfront experience in Monroe County includes the coastal engineering analysis and marine structures design for two piers at the Wyndham Reach Resort and the Casa Marina Resort in Key West. These recreational piers were designed for coastal engineering loads due to their exposure to open waters in Key West. These piers performed well during the hurricanes in 2004-2005 that impacted the Key West area. Also, Coastal Systems provided post-hurricane assessment services for Sunset Key and prepared designs for emergency shore revetment repairs.

Additionally, the Coastal Systems engineering team has evaluated the coastal processes and marine environment throughout the Florida Keys for beach and navigation projects and has an in depth understanding of the marine environment in the Keys. Specifically, the company has developed a regional numerical wave and hydrodynamic model for the area, which provides unprecedented regional and local current and wave information. A brief list of representative local project experience is provided below:

Coastal Management Studies at Long Key, Bahia Honda, Fort Zachary Taylor, and Curry Hammock State Parks – these services included aerial photography, GIS analysis, and shoreline studies at these four parks to establish prioritized coastal and shore protection projects. Prepared and processed funding applications through the Florida DEP for several of these projects.

Fort Zachary Taylor State Park - design and environmental permitting of breakwaters and terminal groin for shore protection. Maintenance repairs designed and permitted in 2001. Performed beach profile surveys and subsequently designed and permitted beach nourishment with construction completed in December, 2007. Currently processing environmental permits for the improvements, the breakwaters, and groin.

Bahia Honda State Park – conducted coastal revetment, surveying, site assessment, and prepared schematic designs of alternative shoreline stabilization alternatives. Coastal engineering report prepared with construction coast estimates.

Past work Experience for the Bureau Veritas Team

Client Name	Florida Department of Environmental Protection Bureau of Design and Construction	Village of Key Biscayne	Monroe County
Project Name and Location	Fort Zachary Taylor State Park, Key West, Florida	Village of Key Biscayne, Florida	Monroe County Mooring Field Feasibility Study, Florida
Project Description	Terminal groin construction, Armor stone placement, and breakwater construction	Beach management consulting	Feasibility Study to evaluate siting and development of new mooring fields in the Florida Keys
Project Start/End Dates	2005 - 2007	2000 - Ongoing	2013 - 2014
Client Contact Name /Phone	Mr. Fred Hand (850) 488-5373	Mr. John Gilbert (305)365-8945 jgilbert@keybiscayne.fl.gov	Mr. Rich Jones (305)289-2805 Jones-Rich@MonroeCounty-FL.Gov
Client Address	3540 Thomasville Road Tallahassee, Florida 32309	Village of Key Biscayne 88 West McIntyre Street Key Biscayne, FL 33149	Monroe County 2798 Overseas Highway, Ste. 420 Marathon, FL 33050
Key Personnel	Tim Blankenship Penny Cutt	Tim Blankenship Christy Brush	Tim Blankenship Christy Brush Penny Cutt
Engineering Services Fee	$60,000	Ongoing	$27,000
Estimated Construction Cost	$412,000	$1,500,00	NA

2.6 Other Certifications/Services

2.6.1 Other Certifications

In Appendix D, Bureau Veritas has provided a copy of our ISO 9001:2008 certificate. In addition to this certification, Bureau Veritas is on target to achieve ISO 14001 and OHSAS 18000 certification in Q4 of 2014. Complimenting these certifications, Bureau Veritas and its team members are licensed to perform engineering services in the State of Florida. Furthermore, our team personnel include not only

Professional Engineers and Geologists who are licensed in the State of Florida but also Florida-Licensed Asbestos Consultants, Florida-certified Mold Inspectors and USEPA-certified lead-based paint risk-assessors. The Bureau Veritas team includes one dedicated Certified Industrial Hygienist with the support of many more CIHs available in the southeastern United States and nationally.

2.6.2 Other Services

With more than 2400 professionals in over 80 offices throughout North America, Bureau Veritas is a truly full-service environmental, health and safety firm. Bureau Veritas offers complete Health, Safety and Environmental services including:

- Auditing and Compliance Assurance
- Climate Change Services
- Due Diligence
- Environmental Risk Management
- Environmental Management Systems
- Laboratories
- Site Investigation, Remediation & Restoration
- Workplace Health & Safety

A more in-depth discussion of our capabilities for Environmental Management Systems and Climate Change and Sustainability services can be found below:

Environmental Management Systems

BVNA guides and assists the clients towards effective environmental management systems (EMS). We help them understand their current environmental status and produce effective solutions for delivering their environmental management objectives. Our goal is to help clients create programs, which grow their people and productivity, not the volume of paper driving their organization.

A successful EMS depends upon an absolute understanding of the factors driving the need for environmental management within your sector and a clear picture of how your company currently performs. Only then can you make the right decision on whether you need to respond and the best way to do so. Our consultants are accredited environmental professionals who can advise you on the different framework options available. Many have served on bodies concerned with the development of the international standards - ISO14000 and The European Eco-Management and Audit Scheme (EMAS) - themselves and so are expertly equipped to clarify the situation

Miami Dade Aviation Department (MDAD)

MDAD retained Bureau Veritas in 2000 and our support continues today. Bureau Veritas to develop, implement and manage their ISO 14001 Program for MDAD's Maintenance, Commodities and, the Civil Engineering & Environmental Divisions.

- Assist in the maintenance of the EMS System for three operational units.
- Conduct training for ISO 14001:2004 EMS Awareness and Internal Auditor Training
- Maintains central database of documents to keep the EMS constantly prepared for ISO Audits

for you and help identify the best solution.

Bureau Veritas EMS capabilities include:

- Corporate environmental policy and strategy
- Benchmarking Relevant Aspects & Impacts
- Analysis of stakeholder expectations
- Evaluation of supply chain pressures
- Systems Review and Assessment (Fitness test)
- Gap Analysis
- Development of rankings of facilities, sites, or business units to benchmark compliance and identify opportunities for improvement
- Systems Streamlining
- Systems Implementation (manuals, procedures, awareness building, training)
- Maintenance and Monitoring
- Internal and Third Party Auditing

As one of the world's largest certification companies we understand ISO and can help you develop programs to comply with ISO.

Climate Change and Sustainability

Bureau Veritas is listed as a global leader in sustainability and energy services. Bureau Veritas can help at any stage in the process – from early startup to verification. Our team of professionals is qualified to provide service offerings as follows:

- Bureau Veritas brings an experienced team of global professionals that have developed and implemented process and procedures for measuring and reporting environmental health and safety metrics of commercial and industrial clients. Our team of professionals is certified to provide verification of corporate sustainability reporting data inclusive of environmental and occupational health and safety (OHS) metrics including carbon sourcing evaluations.
- We are recognized as best practice providers in assurance via organizations such as AccountAbility and the Association of Chartered Certified Accountants (ACCA), as well as in the international Global Reporters Survey conducted by SustainAbility and the United Nations Environment Programme.

Fort Lauderdale Executive Airport

Bureau Veritas was recently awarded a project to provide support development of the Fort Lauderdale Executive (FXE) Airport Sustainable Management Plan. We will be providing consulting services to develop a Sustainability Master Plan that provides the following benefits:

Greater utilization of assets
Reduced operating costs
Reduced energy consumption
Reduced waste/increase recycling
Reduce pollution
Green Building facility management;
Positive community relationships
Reduced life cycle costs
Healthier work environment for employees
Reduce KWH and GHG emissions
Reduced emissions
Air quality
Improved water quality/conservation

- Bureau Veritas staff brings all the relevant skills, knowledge, experience and capabilities to this project. Our proposed team has the right background, skills and experience to conduct assurance of environmental and occupational health and safety data, systems and processes.
- We provide Corporate Responsibility (CR) and Sustainability assurance services for Dow Jones Sustainability Index (DJSI) member companies. We have proven experience in stakeholder engagement via attendance as independent observers at engagement and dialogue sessions. We are also experienced in conducting assurance on issues of high sensitivity to stakeholders and critical to the business.
- Bureau Veritas assurance assignments offer opportunities for innovation, learning and performance improvement. We deliver solutions that reflect clients' individual needs. We combine a structured portfolio of assurance services offering independent and impartial advice, with a flexible and tailored approach to each project, that reflect emerging standards and changing demands in the market place.

Greenhouse Gas Emissions Management

Bureau Veritas' network of greenhouse gas experts are recognized by more than 35 leading accreditation bodies worldwide.

Our solutions include:

- Assessing data collection methods for GHG reporting
- Interpreting requirements for GHG reporting
- Preparing GHG Monitoring Plans
- Determining GHG emissions for mandatory
- and voluntary reporting
- Developing GHG reduction strategies
- Verifying GHG emissions reports

Energy Services

Bureau Veritas is a proven leader in the field of energy services with over 20 years of experience providing clients an informed view on cost-effective solutions.

- Energy strategy
- Energy audits
- Energy efficiency assessments
- Energy performance management

How can BVNA assist with sustainability reporting?

Bureau Veritas can help at any stage, from early startup of a sustainability program to a mature reporting process. Clients benefit from our extensive knowledge of sustainability issues as well as our business insight. Bureau Veritas helps companies integrate their sustainability programs into other business systems for greater effectiveness.

- Developing a sustainability reporting strategy
- Selecting a reporting framework
- Determining methods for collecting required data
- Basic verification of data and reports
- Advanced assurance of reports and processes

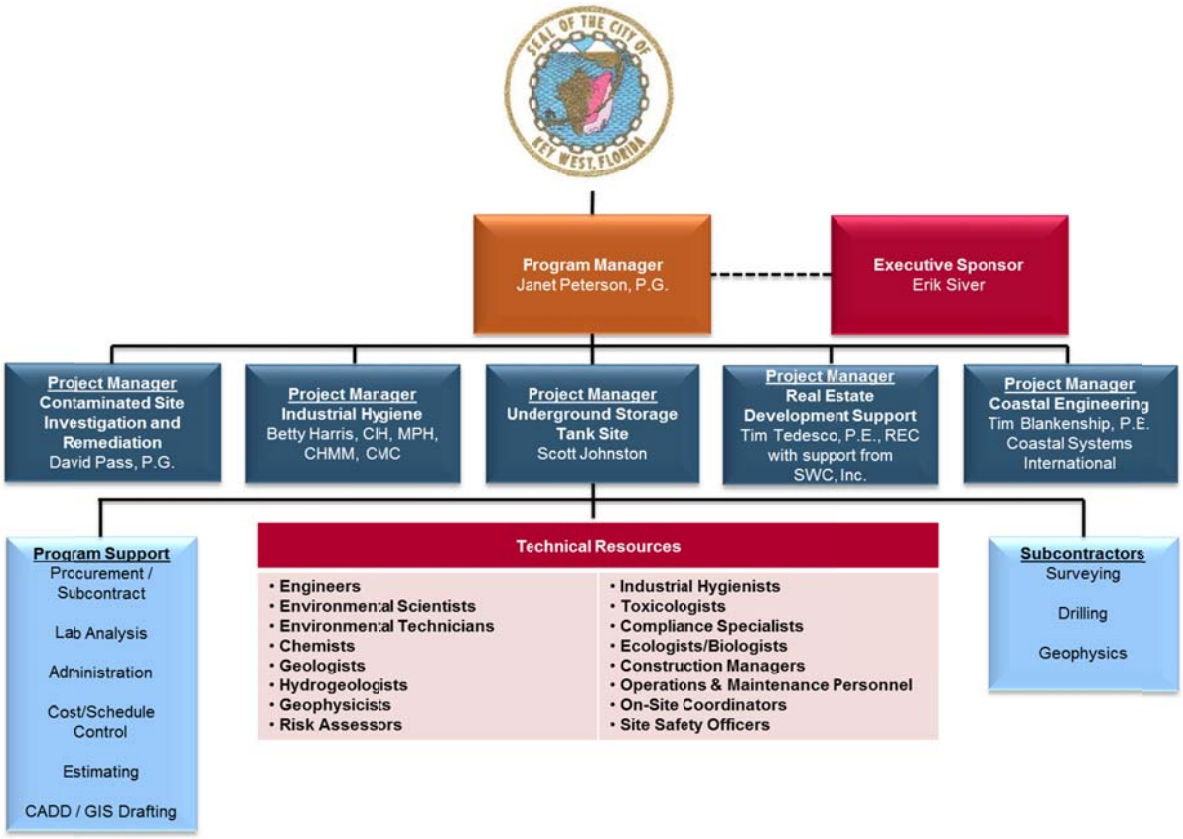
3.0 KEY PERSONNEL

Bureau Veritas is well equipped to provide an experienced team of engineers, geologists, environmental scientists, health and safety professionals and other disciplines to the CITY. Bureau Veritas has assembled a team of Florida-based professionals to serve the CITY for this contract. All team personnel including our strategic team members, Coastal Systems and SWC, are based in either the city of Key West, Miami or Coral Gables.

The team will be led by a Project Manager, Janet Peterson, PG, who has more than 20 years of experience in the State of Florida, including the City of Key West. Ms. Peterson will by supported by an Executive Sponsor, subject matter experts and other team members to deliver quality expertise to the CITY.

The Bureau Veritas team outlined below is dedicated to serving the CITY for all services under this contract. On average, Bureau Veritas maintains a utilization rate of 70% across all of its employees. This allows for adequate capacity to staff projects and schedule resources. The CITY will receive priority with every member's time and availability assigned to this team. Bureau Veritas maintains breadth and depth of resources to provide the CITY with adequate capacity to perform the services under this contract. Furthermore, Bureau Veritas' Project Core Model coupled with our Quality Management System and Project Management Tools (including Deltek and Microsoft Project) enables our Project Managers to adequately staff projects and schedule resources to meet the CITY's objectives and desired outcomes for task orders. And finally, the Executive Sponsor assigned to this program has the authority and responsibility to make assign any and all resources available to the CITY.

The following page contains an organization chart of the team which is followed by further discussion of the team members. Complete resumes for the team members can be found in Appendix E.



Ms. Janet Peterson, P.G. – ***Program Manager -*** Ms. Peterson is a Florida Registered Professional Geologist with more than over 25 years of experience in the environmental assessment and remediation industry. Ms. Peterson has overseen assessment and remediation of a wide range of contaminated sites, including industrial sites, dry cleaners, petroleum, industrial, and wood-treating facilities, manufactured gas plants, electrical utility facilities, and golf courses.

Ms. Peterson's experience encompasses an in-depth knowledge of both public and private-sector contracts as a Project Manager and Consulting Services Manager. Currently, Ms. Peterson oversees Bureau Veritas' Florida-based HSE staff. In these positions, Ms. Peterson has been intimately involved with operations related to management of contamination assessment and remediation projects, asbestos surveys and monitoring during asbestos abatement, indoor air quality and industrial hygiene surveys, UST and petroleum-related services. Since real estate development drives many HSE services, Ms. Peterson has become familiar with a wide variety of environmental issues associated with real estate development. Ms. Peterson is currently on the Board of Directors for the Florida Brownfields Association.

Mr. Erik Siver – Executive Sponsor - Mr. Siver offers more than twenty years of experience within environmental consulting as a program and project manager. Mr. Siver is experienced in managing multidisciplinary teams for environmental projects including acquisition support, petroleum and hazardous materials sites, compliance, auditing, safety, and construction. Mr. Siver is the Bureau Veritas' Health, Safety and Environmental Division's Southeast Business Unit Manager, and as

Executive Sponsor he will ensure that all necessary Bureau Veritas resources are made available to the CITY. This means that we will select and retain the right people with the right values to meet and exceed project requirements and will drive our Quality, Safety and Management programs within our corporate absolutes and principles such as integrity, compliance and the creation of real value. As Executive Sponsor, Mr. Siver will ensure all Bureau Veritas corporate resources will be made available to the team and will provide peer review, technical oversight and fiscal management as needed by the team.

Mr. David Pass, P.G. – Project Manager, Contaminated Site Investigation and Remediation – Mr. Pass is a Registered Professional Geologist in the State of Florida with more than 30 years diverse experience in the environmental and petroleum industries. His experience includes complex subsurface environmental investigations and remediation, regulatory negotiations, litigation support, representation before stakeholder groups, risk management, merger and acquisition due diligence, and vapor intrusion. Mr. Pass has led teams of engineers, geologists and multi-disciplined scientists to accomplish these tasks for numerous Fortune 500 firms including major oil and chemical companies, private entities, State and County entities, and Potentially Responsible Party (PRP) groups. Technologies evaluated/designed and deployed include in-situ chemical oxidation (ISCO), permeable reactive barriers (PRBs), Containment, Stabilization and air-sparging/soil vacuum extraction (AS/SVE).

Mr. Pass has worked directly with the FDEP on the investigation, remediation and closure of more than 20 sites over the last 15 years. Mr. Pass' experience includes complex subsurface environmental investigations and remediation, regulatory negotiations, litigation support, representation before stakeholder groups, risk management, merger and acquisition due diligence, Brownfield site redevelopment and ground water resource assessment and exploration. Mr. Pass was the first vendor to implement soil vacuum extraction as a remediation technology for Chevron USA in the southeastern U.S. and became a Chevron USA preferred vendor for remediation systems while president /owner of United Science and Technologies, Inc. (USTI).

Mrs. Betty Harris, CIH, MPH, CHMM, CMC - Project Manager, Industrial Hygiene - Mrs. Harris has more than 33 years of multidisciplinary experience in occupational health and safety. Her experience includes both general industry and government projects at a variety of types and project work sites including DOE, industrial facilities, and private sector sites such as schools, hospitals and universities. Ms. Harris served as the Associate Director of the Alabama OSHA 7(c) (1) Consultation program for providing comprehensive industrial hygiene, OSHA compliance assistance and ergonomic evaluations in a wide variety of diverse small and medium-sized employers in Alabama. Additionally, she was involved with the hazardous waste program for industries in Alabama, asbestos in schools K-12, and lead-based paint in housing, as well as providing assistance to employers to achieve OSHA VPP status.

Ms. Harris has developed and taught courses in fundamentals of industrial hygiene, 40-Hour Asbestos Abatement Supervisor and Asbestos Worker Training courses, 40-Hour Hazardous Waste Operations and Emergency Response courses, and served as an Adjunct Assistant Professor in the College of Public Health and Environmental Sciences at the University of South Carolina, Columbia, South Carolina. She also serves as an expert witness on subjects related to mold and indoor environmental quality, industrial hygiene and employee exposure issues.

Mr. Scott Johnston – Project Manager, Underground Storage Tank Sites - Mr. Johnston has over 23 years of experience in the environmental assessment and remediation industry. Mr. Johnston has an

extensive knowledge of regulatory compliance and permitting and has conducted hundreds of environmental site assessments and remediation projects in accordance with the Federal, State and local regulations. Mr. Johnston has conducted hundreds of Site Assessment Investigations and been responsible for the design, installation, implementation and operation and maintenance for dozens of remediation projects ranging in scope from multi-media source removals to logic-controlled in-situ remediation systems. Many of the site assessment activities and subsequent Remedial System installation activities were completed under the Florida Department of Environmental Protection (FDEP) Petroleum Preapproval Program. Mr. Johnston has also been responsible for the preparation of Spill Prevention, Control and Countermeasure Plans at over 330 electrical substation facilities in the northeast and mid-Atlantic United States in conformance with the requirements specified in 40 CFR, Part 112.

Mr. Tim Tedesco, P.E. – Project Manager, Real Estate Development Support - Mr. Tedesco is a Professional Engineer (Florida P.E. Registration targeted for Summer of 2014) with over 20 years of experience in providing environmental engineering and related professional services to federal, municipal and private clients. Mr. Tedesco's experience includes environmental Project Management, Phase I and II Environmental Assessments, Contamination Assessment Plans, Contamination Assessment Reports, Storage Tank Assessments, Remedial Action Plans, Remedial Action Construction, Remedial System O&M, Remedial System Optimization Studies, Resource Conservation and Recovery Act (RCRA) compliance, Emergency Planning and Community Right-To-Know Act (EPCRA) compliance, Response Clean Air Act compliance and Clean Water Act compliance. These services include sites with petroleum, aviation fuels, radioactive, and hazardous material releases. Mr. Tedesco has been responsible for coordinating, presenting and negotiating with USEPA and various state regulatory agencies. He is familiar with federal and state regulations dealing with contamination cleanup, hazardous materials, National Pollutant Discharge Elimination System (NPDES), spill planning/response and petroleum management.

Mr. Timothy Blankenship, P.E. (Coastal Systems International, Inc.) – Project Manager, Coastal Engineering - Mr. Blankenship has over 15 years of experience in the civil and coastal engineering fields. His broad range of experience includes projects involving waterfront facility assessment and rehabilitation design, bridge engineering projects involving structural assessment, structural design and hydraulic analysis/design; land development projects including drainage design and environmental permitting, and construction phase services for several civil projects.

Mr. Blankenship is experienced in all facets of coastal engineering including the planning, design and monitoring of shore protection projects. Projects have included beach nourishment and coastal structures such as jetties, breakwaters and groynes. He has conducted numerical modeling studies of coastal processes along shorelines as well as for the design of marinas and harbors. He has also planned and conducted field investigations consisting of hydrographic surveys, oceanographic data collection, and underwater inspections.

Ms. Sandra Walters, M.A. (Sandra Walters Consultants, Inc.) – Key Team Member - Ms. Walters has over 30 years of professional experience in Florida and especially in the Florida Keys. She has conducted and supervised environmental studies, has successfully permitted projects ranging from single family homes to developments of regional impact, has conducted Phase I and II Environmental Site Assessments, fuel storage tank removals, and acquired No Further Action decisions for many properties. Ms. Walters has extensive experience in design and implementation of public participation

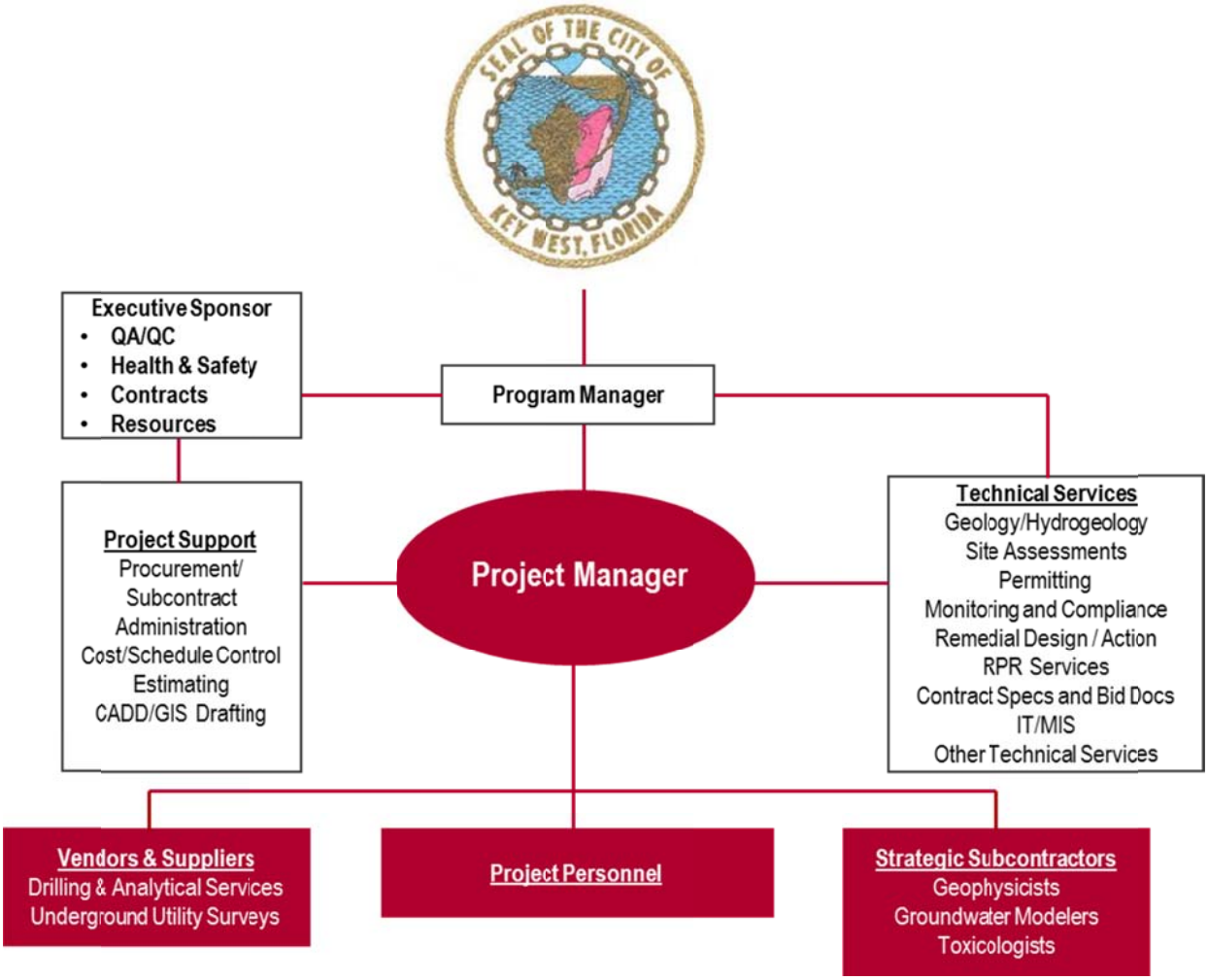
programs and review and development of comprehensive plans and has represented clients successfully with many agencies and government boards. She is presently a member of the South Florida Regional Planning Council, appointed by governors Bush, Crist and Scott, serving as chair in 2009 and serves on EPA's Water Quality Steering Committee for the Florida Keys National Marine Sanctuary. Additionally, Ms. Walters served from 2000 to 2004 as a Governor's appointee on Florida's Acquisition and Restoration Council, which supervises purchase and management of State conservation lands.

The Bureau Veritas team is licensed to perform the environmental engineering services specified in the RFQ. Current team certifications are listed below.

SPECIALTY	TEAM QUALIFIER(S)	LICENSE
Engineering	• Ken Brooke, PE, Bureau Veritas • Tim Tedesco, PE, Bureau Veritas (pending) • Tim Blankenship, PE, Coastal Systems • Jim Brush, PE, SWC	Florida-licensed Professional Engineers
Geology	• Janet Peterson, PG, Bureau Veritas • David Pass, PG, Bureau Veritas	Florida-licensed Professional Geologists
Asbestos	• Robert Lea, PE, FLAC, Bureau Veritas	Florida-licensed Asbestos Consultant
Water Intrusion/Mold	• Sergio Adasme, Bureau Veritas	Florida-licensed Mold Inspector
Industrial Hygiene	• Betty Harris, CIH, Bureau Veritas	Certified Industrial Hygienist
Lead-Based Paint	• Lynn Tait, Bureau Veritas	USEPA-certified Lead-Based Paint Risk Assessor

4.0 Program Management Approach

As part of our ISO 9001:2008 quality management system (QMS), Bureau Veritas utilizes a Project Core Model (PCM) to manage all projects and programs. This model is a standard operating procedure that enables our project and program managers to implement solutions that meet a client's objectives and desired outcomes. Appendix F contains the Table of Contents for our Project Core Model. Bureau Veritas utilizes a program management approach of centralized management with local execution. Bureau Veritas has empowered our assigned Project Managers to be the primary technical point-of-contact on all projects ensuring that client directives are clearly understood and implemented. The figure below illustrates the centralized management approach.



The Program Manager and Project Managers are the key management personnel for this contract. Their responsibilities and authorities are summarized in the table below.

Key Management Responsibilities and Authorities	
Responsibilities	**Authorities**
Contract Administrator/Program Director	
♦ Total contract management ♦ Primary point of contact ♦ Interacts with the CITY on contractual and technical matters ♦ Supervises Project Managers ♦ Responds to the CITY requests ♦ Compliance with work scopes, schedules, and budgets ♦ Problem resolution ♦ Program H&S and QC; coordinates weekly meetings ♦ Subcontract management and control	♦ Authority to bind company ♦ Contract negotiations ♦ Accepts project assignments ♦ Assigns Bureau Veritas Team personnel ♦ Approves all key staff assignments ♦ Resource allocation ♦ Approves budgets and schedules ♦ Approves subcontract agreements ♦ Stops work if unsafe
Project Managers	
♦ Management/technical direction of project execution ♦ Interact with the CITY on project-specific basis ♦ Submit reports and other deliverables ♦ Oversee subcontractor daily performance ♦ Control project costs and schedules ♦ Project H&S and QC ♦ Manage project change control	♦ Review/approve deliverables ♦ Certify work within technical discipline ♦ Subcontractor selection/evaluation ♦ Approve project budgets and expenditures ♦ Stop work if unsafe ♦ Approve invoices to the CITY and stop work authority ♦ Approve project payables

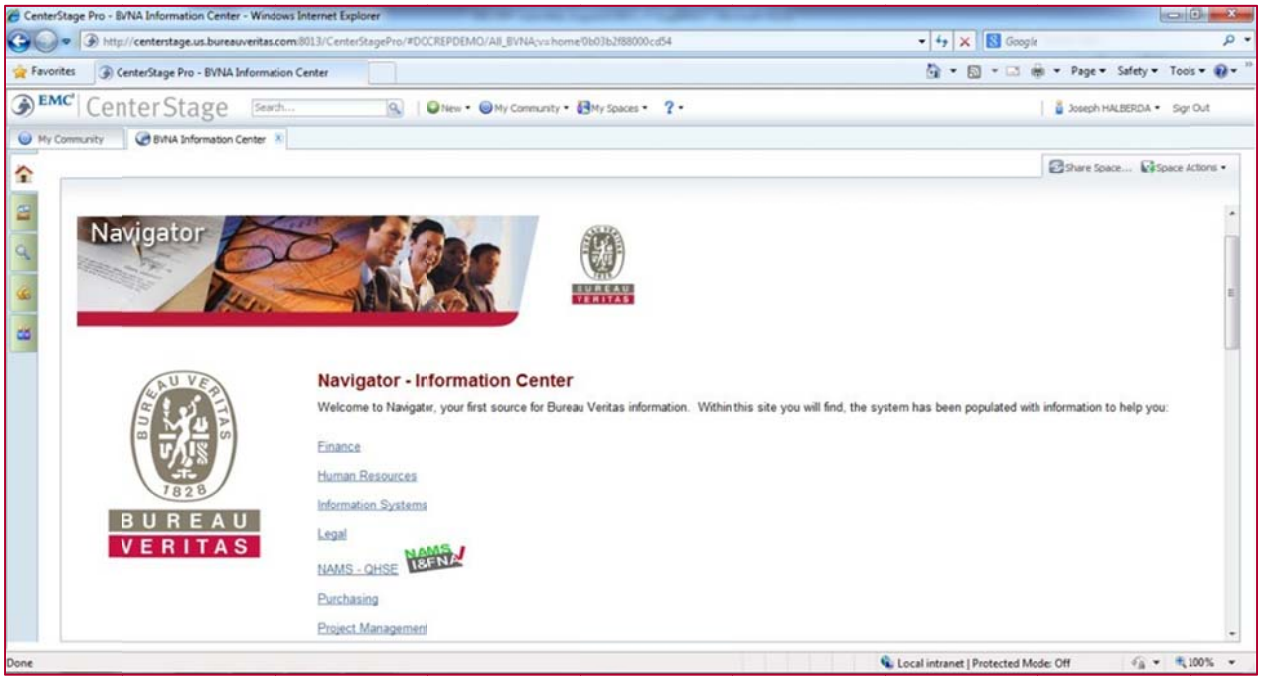
Technical Competency

Bureau Veritas, through its ISO 9001: 2008 QMS provides checks and balances within our organization to assure Technical Competence. Specifically, BVNA utilizes Technical Operations Manuals (TOMs), Standard Operating Procedures (SOPs), Monitoring activities, required and selective Training and Project Management training as outlined in our Project Management Core Model.

NAMS-05 Management Review
NAMS-10 Control of Documents
NAMS-30 Corrective Actions
NAMS-35 Customer Complaint
NAMS-37 Monitoring Activities
NAMS-40 Internal Audits
NAMS-57 Sub-Contracting
NAMS-58 Service Provision
NAMS-59 Equipment
NAMS-70 Personnel and Training

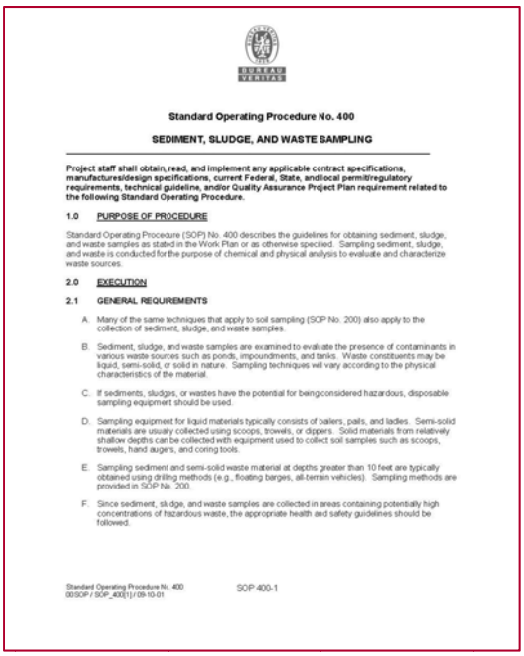
Technical Operations Manuals (TOMs) – Each of our technical specialty groups (Compliance, Remediation, Safety, Behavior Based Safety, et al.) has generated a set of technical guidance manuals to assist our staff in providing consistent and technically defensible services. These manuals are used as training and procedural tools, instructing staff on the preferred method of conducting a particular service. Our TOMs are reviewed/amended annually and as needed throughout the year – or for a particular project or new service, additions to the TOMS are made or a new TOM may be developed.

Standard Operating Procedures (SOPs) – Bureau Veritas has also developed SOPs for many activities associated with its environmental service business line. They provide guidance to ensure that personnel and equipment provide consistent, high-quality services. The SOPs emphasize safety, compliance with local regulations, project quality plans, technical requirements and BVNA standards. These SOPs are posted on-line and are available to all Bureau Veritas HSE employees through our knowledge sharing platform, *Navigator*.



Key SOPs include:

- Records, Reports, Field Reporting, Documentation, and Record Retention
- Borehole Logging and Material Classification
- Subsurface Clearance
- Soil Sampling and Rock Coring
- Well Installation
- Instantaneous Head
- Aquifer Tests Slug Tests
- Grouting Procedures
- Field Measurements
- Sediment, Sludge and Waste Sampling
- Surface Water Sampling
- Groundwater Sampling, including low flow methods
- Equipment Decontamination
- Quality Assurance Sampling



Standard Operating Procedure No. 400

SEDIMENT, SLUDGE, AND WASTE SAMPLING

Project staff shall obtain,read, and implement any applicable contract specifications, manufactures/design specifications, current Federal, State, and/ocal permit/regulatory requirements, technical guideline, and/or Quality Assurance Project Plan requirement related to the following Standard Operating Procedure.

1.0 PURPOSE OF PROCEDURE

Standard Operating Procedure (SOP) No. 400 describes the guidelines for obtaining sediment, sludge, and waste samples as stated in the Work Plan or as otherwise specified. Sampling sediment, sludge, and waste is conducted for the purpose of chemical and physical analysis to evaluate and characterize waste sources.

2.0 EXECUTION

2.1 GENERAL REQUIREMENTS

A. Many of the same techniques that apply to soil sampling (SOP No. 200) also apply to the collection of sediment, sludge, and waste samples.

B. Sediment, sludge, and waste samples are examined to evaluate the presence of contaminants in various waste sources such as ponds, impoundments, and tanks. Waste constituents may be liquid, semi-solid, or solid in nature. Sampling techniques wil vary according to the physical characteristics of the material.

C. If sediments, sludges, or wastes have the potential for beingconsidered hazardous, disposable sampling equipment should be used.

D. Sampling equipment for liquid materials typically consists of sailers, pails, and ladles. Semi-solid materials are usually collected using scoops, trowels, or dippers. Solid materials from relatively shallow depths can be collected with equipment used to collect soil samples such as scoops, trowels, hand augers, and coring tools.

E. Sampling sediment and semi-solid waste material at depths greater than 10 feet are typically obtained using drilling methods (e.g., floating barges, all-terrain vehicles). Sampling methods are provided in SOP No. 200.

F. Since sediment, sludge, and waste samples are collected in areas containing potentially high concentrations of hazardous waste, the appropriate health and safety guidelines should be followed.

Standard Operating Procedure No. 400
00SOP / SOP_400(1) / 09-10-01

SOP 400-1

- Sample Chain of Custody Procedures
- Control, Calibration and Maintenance of Measure and Test Equipment

Monitoring Activities – Field monitoring of our staff by management is an annual requirement. On a larger project, this documented monitoring could occur as often as weekly or daily and would involve elements of both technical competency and safety on the job.

Internal Audits – As part of ongoing monitoring of a project, internal audits may be justified. The elements of the audit vary by project, but generally consist of documentation, training and deliverables as required by the project. The Executive Sponsor would typically direct this audit using internal resources and develop an audit appropriate for the project.

Equipment – Use of the proper equipment, ranging from personal protective equipment required for the job task to the technical equipment to complete the project work are part of the management system. Critical equipment issues, such as training for proper usage of required personal protective equipment or the proper calibration methods for equipment, are part of the day-to-day monitoring and documentation requirements.

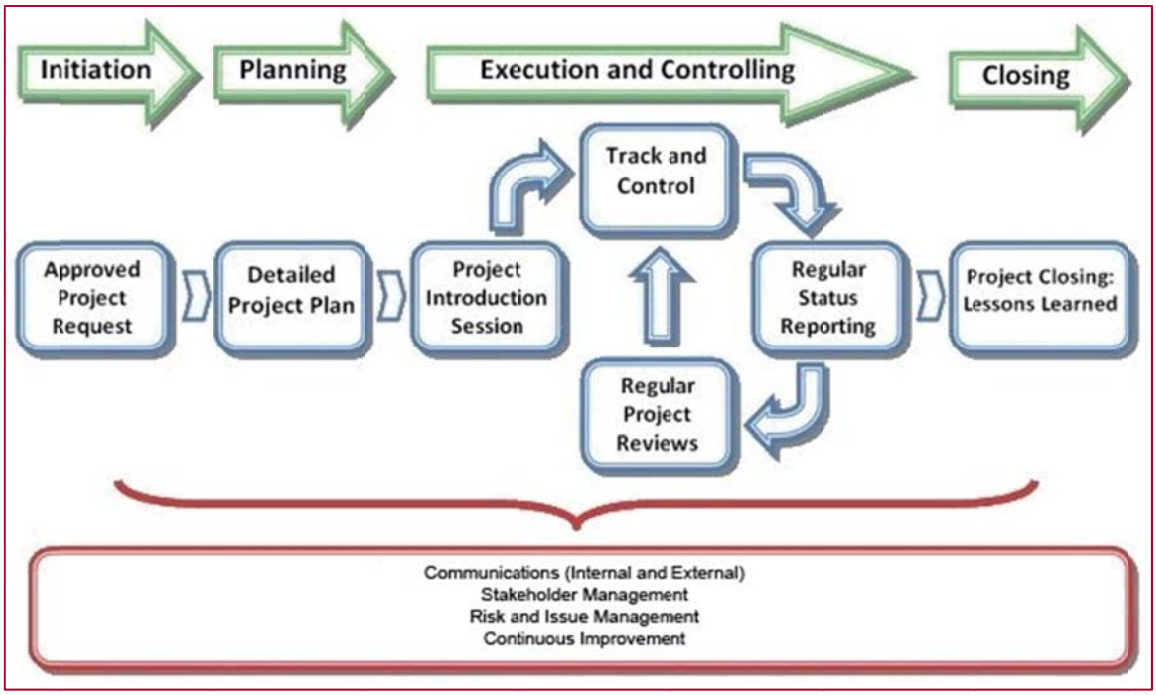
Maintenance of Schedules and Cost Control

Bureau Veritas has demonstrable and documented evidence of our ability to maintain cost control, comply with schedules, and provide quality performance while working safely under the most challenging and adverse project conditions. Our experienced Program Director and Project Managers effectively utilize Bureau Veritas' ISO 9001:2008 certified management systems and processes to consistently exceed client expectations for project performance. The application of these proven management tools yields added efficiency and allows the project team to focus on opportunities to control costs, be technically innovative, and provide outstanding value to our clients.

Bureau Veritas will furnish all personnel resources necessary to provide comprehensive services in support of this contract. These resources include Bureau Veritas personnel and the Subcontractors identified in this response. Additional support from Subject Matter Experts within Bureau Veritas' network of professionals will be accessed to provide their expertise as deemed necessary to successfully complete prescribed task.

This submittal has been developed to assure the CITY of the Bureau Veritas Team's strength and our desire to be a contractor for the CITY; our demonstrated capability and capacity to provide responsive, technically sound, and cost-effective services; and our innovative spirit in addressing all elements of this RFQ.

Bureau Veritas offers the CITY a total business solutions approach to execution of project assignments that we have used effectively on other, similar contracts. A schematic showing Bureau Veritas' approach to project execution is provided in the figure below.



Cost Control

Bureau Veritas employs an integrated accounting and project management system (Deltek) that allows us to track and monitor incurred labor costs, laboratory fees, subcontractor costs, and reimbursable expenses for each project on a real-time basis. Our project managers can readily monitor project cost status at all times. Hard copy and electronic reports are also available.

Labor hours are normally posted on Friday (COB) as incurred. Reimbursable expenses, laboratory fees, and subcontractor invoices are posted on a continuous basis. Our project managers monitor cost versus budget on a continuous basis, and take cost-control action if necessary.

Other mechanisms for cost control used by our project managers include the following:

- Definition of levels of authority of project personnel for expenditures.
- Legal counsel and program manager review of all contracts and subcontracts
- Project manager review and signoff of all purchase orders (prior to expense) and invoices to a certain level; program manager and CEO review required above a certain level
- Utilization of qualified staff nearest the project site to reduce travel costs.
- Working with subcontractors on a not-to-exceed contract basis and reviewing all subcontractor time sheets and invoices for reimbursable expenses.
- Adherence to quality control procedures and collection of backup samples (to prevent the need for returning to the site for re-sampling).
- Standardization of data table formats (to prevent reinvention).
- Avoidance of downtime by maintaining backup equipment onsite and within laboratories.
- Avoidance of downtime by thorough understanding of objectives, assignments, schedule, and budget with clear communication to project personnel.
- Providing the Commonwealth with monthly Budget Summaries to track project budgets.

- Providing the Commonwealth with periodic Project Summaries to track the status of assigned field projects and deliverables.

Bureau Veritas will not exceed the authorized amount of the CITY contract or any task order and will notify the CITY in advance of any potential cost issues. Any out of scope services and associated fees will be addressed through written change orders that will be submitted to the CITY.

5.0 CONCLUSION

Bureau Veritas appreciates the opportunity to submit this proposal and looks forward to working with you on this program, if selected. Throughout this submittal we have articulated our desire and capability to be the consultant of choice. From our technical competence and experience to our culture of safety, compliance and service, and from our dedicated and qualified team resources to our project management and certified, systematic processes, Bureau Veritas believes that we have the ability, resources and tools to exceed the CITY's expectations.

Bureau Veritas is committed to this partnership and will put forth our "best and brightest" to support your objectives and expected outcomes. As projects evolve and new challenges are identified we are committed to keeping our team strong and will continue to bring to bear the "right" resources for the job. We embrace continuous improvement and accept the responsibility to build on lessons learned.

Bureau Veritas will not sacrifice safety performance and will only offer the people with the appropriate level of technical proficiency for the assigned tasks.

We look forward to working with you on this program. Please call me at 305.436.1221 if you have any questions.

Sincerely:

Janet M. Peterson, P.G.
Program Manager
Bureau Veritas North America, Inc.
Health, Safety, and Environmental Services
p: 305.436.1221
e: janet.peterson@us.bureauveritas.com

Reviewed by:

Erik Siver, EIT
Southeast Area Manager
Bureau Veritas North America, Inc.
Health, Safety and Environmental Services
p: 770.499.4001
e: erik.siver@us.bureauveritas.com

APPENDIX A
ADDENDUM 1

CITY OF KEY WEST
3126 Flagler Avenue
Key West, FL 33040

ADDENDUM NO. 1 – RFQ Environmental Engineering/ ITB 14-004

This addendum is issued as supplemental information to the bid package for clarification of certain matters of both a general and a technical nature. The referenced bid package is hereby addended in accordance with the following items:

RFI Questions Submitted:

1.) Does the bid require that respondents be a licensed PE?

Yes, you should include a Licensed PE on your team.

2.) Can a Prime submit as a sub to another firm? Also, can a sub-contractor submit with more than one firm?

Yes.

3.) Please confirm the attached (46 pages) is the complete PDF for the subject submittal. Page 1 of the PDF states that the document is 47 pages in length. It also states that the "Request for Qualifications" section is 10 pages in length. However, per the attached, the section is 8 pages. I just want to be sure there are no missing pages.

Yes there are 46 pages and there are only 8 pages in the RFQ section.

4.) Under the "Scope of Work" section on page 7 of the RFQ, services from a Resident Project Representative would be required. Would a RPR differ from the Engineer of Record in this instance?

Yes, the RPR is the on-site staff providing daily (or other agreed on frequency) oversight (e.g., inspection)

5.) May firms only submit for one discipline or would a sub-consultant be needed to satisfy all service requirements per submission?

Must submit for all, using a sub-consultant as necessary.

6.) Will there be any page number limitations for any part of the qualification package?

Unless otherwise so stated in the RFQ, no limit

7.) Is there an incumbent? If so, can you provide the company name?

There is not an "incumbent" relative to an Environmental-specific General Services RFQ.

8.) Just to clarify the RFQ instructions, please advise: Put COPY Response and CD-ROM in envelope, seal it, mark it COPY and place inside of Envelope with ORIGINAL Response and CD-ROM, then seal that envelope? One envelope inside of another, correct?

Correct.

9.) Signed certifications are required by prime and subs, or just prime?

Just prime

10.) Please confirm that the required forms (Anti-Kickback Affidavit, Public Entity Crimes Certification, Equal Benefits for Domestic Partners Affidavit, and Cone of Silence Affidavit) are to be completed by the prime consultant only.

Correct.

11.) Are insurance certificates required to be provided at the time qualifications packages are submitted?

Yes

12.) Is a "description of the contractor's employee benefits plan" (page 17 of the RFQ) required to be included with the executed Equal Benefits for Domestic Partners Affidavit?

No

13.) Please confirm that electronic signatures are acceptable as originals.

Electronic signatures are acceptable

All Bidders shall acknowledge receipt and acceptance of this Addendum No. 1 by submitting the addendum with their proposal. Proposals submitted without acknowledgement or without this Addendum may be considered non-responsive.

Janet M. Pittman — Bureau Veritas North America, Inc.

Signature — Name of Business

APPENDIX B
CITY OF KEY WEST AFFADAVITS AND CERTIFICATIONS FOR BVNA

ANTI-KICKBACK AFFIDAVIT

STATE OF FLORIDA)
: SS
COUNTY OF Miami-Dade)

I, the undersigned hereby duly sworn, depose and say that no portion of the sum herein bid will be paid to any employees of the City of Key West as a commission, kickback, reward or gift, directly or indirectly by me or any member of my firm or by an officer of the corporation.

By: Janet M. Pitcher

Sworn and subscribed before me this

2nd Day of July, 2014.

Mayra Yanes
NOTARY PUBLIC, State of Florida at Large

My Commission Expires: 11/15/15

MAYRA YANES
NOTARY PUBLIC
STATE OF FLORIDA
Comm# EE143323
Expires 11/15/2015

SWORN STATEMENT UNDER SECTION 287.133(3)(a)
FLORIDA STATUTES, ON PUBLIC ENTITY CRIMES

THIS FORM MUST BE SIGNED IN THE PRESENCE OF A NOTARY PUBLIC OR OTHER OFFICE AUTHORIZED TO ADMINISTER OATHS.

1. This sworn statement is submitted with Bid, Bid or Contract No. _____ for RFQ 14-004; Environmental Engineering Services

2. This sworn statement is submitted by Bureau Veritas North America, Inc.
(Name of entity submitting sworn statement)

whose business address is 8175 NW 12 St., Suite 110, Miami, FL 33126 and (if applicable) its Federal Employer Identification Number (FEIN) is 061689244 (If the entity has no FEIN, include the Social Security Number of the individual signing this sworn statement.)

3. My name is Janet M. Peterson and my relationship to
(Please print name of individual signing)

the entity named above is Senior Project Manager, Health Safety and Environmental Division

4. I understand that a "public entity crime" as defined in Paragraph 287.133(1)(g), Florida Statutes, means a violation of any state or federal law by a person with respect to and directly related to the transaction of business with any public entity or with an agency or political subdivision of any other state or with the United States, including but not limited to, any Bid or contract for goods or services to be provided to any public entity or an agency or political subdivision of any other state or of the United States and involving antitrust, fraud, theft, bribery, collusion, racketeering, conspiracy, material misrepresentation.

5. I understand that "convicted" or "conviction" as defined in Paragraph 287.133(l)(b), Florida Statutes, means a finding of guilt or a conviction of a public entity crime, with or without an adjudication guilt, in any federal or state trial court of record relating to charges brought by indictment information after July 1, 1989, as a result of a jury verdict, nonjury trial, or entry of a plea of guilty or nolo contendere.

6. I understand that an "affiliate" as defined in Paragraph 287.133(1)(a), Florida Statutes, means

   1. A predecessor or successor of a person convicted of a public entity crime: or

   2. An entity under the control of any natural person who is active in the management of t entity and who has been convicted of a public entity crime. The term "affiliate" includes those officers, directors, executives, partners, shareholders, employees, members, and agents who are active in the management of an affiliate. The ownership by one person of shares constituting controlling interest in another person, or a pooling of equipment or income among persons when not for fair market value under an arm's length agreement, shall be a prima facie case that one person controls another person. A person who knowingly enters into a joint venture with a person who has been convicted of a public entity crime in Florida during the preceding 36 months shall be considered an affiliate.

7. I understand that a "person" as defined in Paragraph 287.133(1)(8), Florida Statutes, means any natural

person or entity organized under the laws of any state or of the United States with the legal power to enter into a binding contract and which Bids or applies to Bid on contracts for the provision of goods or services let by a public entity, or which otherwise transacts or applies to transact business with a public entity. The term "person" includes those officers, directors, executives, partners, shareholders, employees, members, and agents who are active in management of an entity.

8. Based on information and belief, the statement, which I have marked below, is true in relation to the entity submitting this sworn statement. (Please indicate which statement applies.)

X Neither the entity submitting this sworn statement, nor any officers, directors, executives, partners, shareholders, employees, members, or agents who are active in management of the entity, nor any affiliate of the entity have been charged with and convicted of a public entity crime subsequent to July 1, 1989.

___The entity submitting this sworn statement, or one or more of the officers, directors, executives, partners, shareholders, employees, members, or agents who are active in management of the entity, or an affiliate of the entity has been charged with and convicted of a public entity crime subsequent to July 1, 1989, AND (Please indicate which additional statement applies.)

___There has been a proceeding concerning the conviction before a hearing of the State of Florida, Division of Administrative Hearings. The final order entered by the hearing officer did not place the person or affiliate on the convicted vendor list. (Please attach a copy of the final order.)

___The person or affiliate was placed on the convicted vendor list. There has been a subsequent proceeding before a hearing officer of the State of Florida, Division of Administrative Hearings. The final order entered by the hearing officer determined that it was in the public interest to remove the person or affiliate from the convicted vendor list. (Please attach a copy of the final order.)

___The person or affiliate has not been put on the convicted vendor list. (Please describe any action taken by or pending with the Department of Environmental Services.)

Janet M. Peterson
(Signature)

7-2-2014
(Date)

STATE OF Florida

COUNTY OF Miami-Dade

PERSONALLY APPEARED BEFORE ME, the undersigned authority,

Janet M. Peterson who, after first being sworn by me, affixed his/her signature in the
(Name of individual signing)

space provided above on this 2nd day of July, 2014.

Mayra Yanes

My commission expires:
NOTARY PUBLIC

11/15/15

MAYRA YANES
NOTARY PUBLIC
STATE OF FLORIDA
Comm# EE143323
Expires 11/15/2015

EQUAL BENEFITS FOR DOMESTIC PARTNERS AFFIDAVIT

STATE OF FLORIDA)
: SS
COUNTY OF Miami-Dade)

I, the undersigned hereby duly sworn, depose and say that the firm of Bureau Veritas North America, Inc. provides benefits to domestic partners of its employees on the same basis as it provides benefits to employees' spouses per City of Key West Ordinance Sec. 2-799.

By: Terit M. Peterson

Sworn and subscribed before me this

2nd Day of July, 2014.

Mayra Yanes

NOTARY PUBLIC, State of Florida at Large

MAYRA YANES
NOTARY PUBLIC
STATE OF FLORIDA
Comm# EE143323
Expires 11/15/2015

My Commission Expires: 11/15/15

APPENDIX C
CITY OF KEY WEST AFFADAVITS AND CERTIFICATIONS FOR TEAM MEMBERS

ANTI-KICKBACK AFFIDAVIT

STATE OF FLORIDA)
: SS
COUNTY OF Miami-Dade)

I, the undersigned hereby duly sworn, depose and say that no portion of the sum herein bid will be paid to any employees of the City of Key West as a commission, kickback, reward or gift, directly or indirectly by me or any member of my firm or by an officer of the corporation.

By: Harvey Losso

Sworn and subscribed before me this

26 Day of June, 2014.

NOTARY PUBLIC, State of Florida at Large

DARLENE SANCHEZ-OSPINA
MY COMMISSION # EE 220699
EXPIRES: July 31, 2016
Bonded Thru Notary Public Underwriters

My Commission Expires: July 31, 2016

SWORN STATEMENT UNDER SECTION 287.133(3)(a)
FLORIDA STATUTES, ON PUBLIC ENTITY CRIMES

THIS FORM MUST BE SIGNED IN THE PRESENCE OF A NOTARY PUBLIC OR OTHER OFFICE AUTHORIZED TO ADMINISTER OATHS.

1. This sworn statement is submitted with Bid, Bid or Contract No. _____ for _____

2. This sworn statement is submitted by Coastal Systems International Inc
(Name of entity submitting sworn statement)

whose business address is 464 S. Dixie Highway, Coral Gables Florida 33146 and (if applicable) its Federal Employer Identification Number (FEIN) is 65-0543399. (If the entity has no FEIN, include the Social Security Number of the individual signing this sworn statement.)

3. My name is R. Harvey Sasso and my relationship to
(Please print name of individual signing)

the entity named above is President.

4. I understand that a "public entity crime" as defined in Paragraph 287.133(1)(g), Florida Statutes, means a violation of any state or federal law by a person with respect to and directly related to the transaction of business with any public entity or with an agency or political subdivision of any other state or with the United States, including but not limited to, any Bid or contract for goods or services to be provided to any public entity or an agency or political subdivision of any other state or of the United States and involving antitrust, fraud, theft, bribery, collusion, racketeering, conspiracy, material misrepresentation.

5. I understand that "convicted" or "conviction" as defined in Paragraph 287.133(l)(b), Florida Statutes, means a finding of guilt or a conviction of a public entity crime, with or without an adjudication guilt, in any federal or state trial court of record relating to charges brought by indictment information after July 1, 1989, as a result of a jury verdict, nonjury trial, or entry of a plea of guilty or nolo contendere.

6. I understand that an "affiliate" as defined in Paragraph 287.133(1)(a), Florida Statutes, means

   1. A predecessor or successor of a person convicted of a public entity crime: or

   2. An entity under the control of any natural person who is active in the management of t entity and who has been convicted of a public entity crime. The term "affiliate" includes those officers, directors, executives, partners, shareholders, employees, members, and agents who are active in the management of an affiliate. The ownership by one person of shares constituting controlling interest in another person, or a pooling of equipment or income among persons when not for fair market value under an arm's length agreement, shall be a prima facie case that one person controls another person. A person who knowingly enters into a joint venture with a person who has been convicted of a public entity crime in Florida during the preceding 36 months shall be considered an affiliate.

7. I understand that a "person" as defined in Paragraph 287.133(1)(8), Florida Statutes, means any natural

person or entity organized under the laws of any state or of the United States with the legal power to enter into a binding contract and which Bids or applies to Bid on contracts for the provision of goods or services let by a public entity, or which otherwise transacts or applies to transact business with a public entity. The term "person" includes those officers, directors, executives, partners, shareholders, employees, members, and agents who are active in management of an entity.

8. Based on information and belief, the statement, which I have marked below, is true in relation to the entity submitting this sworn statement. (Please indicate which statement applies.)

___Neither the entity submitting this sworn statement, nor any officers, directors, executives, partners, shareholders, employees, members, or agents who are active in management of the entity, nor any affiliate of the entity have been charged with and convicted of a public entity crime subsequent to July 1, 1989.

___The entity submitting this sworn statement, or one or more of the officers, directors, executives, partners, shareholders, employees, members, or agents who are active in management of the entity, or an affiliate of the entity has been charged with and convicted of a public entity crime subsequent to July 1, 1989, AND (Please indicate which additional statement applies.)

___There has been a proceeding concerning the conviction before a hearing of the State of Florida, Division of Administrative Hearings. The final order entered by the hearing officer did not place the person or affiliate on the convicted vendor list. (Please attach a copy of the final order.)

___The person or affiliate was placed on the convicted vendor list. There has been a subsequent proceeding before a hearing officer of the State of Florida, Division of Administrative Hearings. The final order entered by the hearing officer determined that it was in the public interest to remove the person or affiliate from the convicted vendor list. (Please attach a copy of the final order.)

___The person or affiliate has not been put on the convicted vendor list. (Please describe any action taken by or pending with the Department of Environmental Services.)

R Harvey Sasso
(Signature)

June 26, 2014
(Date)

STATE OF Florida

COUNTY OF Miami-Dade

PERSONALLY APPEARED BEFORE ME, the undersigned authority,

R. Harvey Sasso who, after first being sworn by me, affixed his/her signature in the
(Name of individual signing)

space provided above on this 26 day of June, 2014.

My commission expires:
NOTARY PUBLIC

DARLENE SANCHEZ-OSPINA
MY COMMISSION # EE 220699
EXPIRES: July 31, 2016
Bonded Thru Notary Public Underwriters

EQUAL BENEFITS FOR DOMESTIC PARTNERS AFFIDAVIT

STATE OF FLORIDA)
: SS
COUNTY OF Miami-Dade)

I, the undersigned hereby duly sworn, depose and say that the firm of _____ provides benefits to domestic partners of its employees on the same basis as it provides benefits to employees' spouses per City of Key West Ordinance Sec. 2-799.

By: _____

Sworn and subscribed before me this

26 Day of June, 2014.

_____
NOTARY PUBLIC, State of Florida at Large

DARLENE SANCHEZ-OSPINA
MY COMMISSION # EE 220699
EXPIRES: July 31, 2016
Bonded Thru Notary Public Underwriters

My Commission Expires: July 31, 2016

City Ordinance Sec. 2-799
Requirements for City Contractors to Provide Equal Benefits for Domestic Partners

(a) Definitions. For purposes of this section only, the following definitions shall apply:

(1) ***Benefits*** means the following plan, program or policy provided or offered by a contractor to its employees as part of the employer's total compensation package: sick leave, bereavement leave, family medical leave, and health benefits.

(2) ***Bid*** shall mean a competitive bid procedure established by the city through the issuance of an invitation to bid, request for proposals, request for qualifications, or request for letters of interest.

(3) ***Cash equivalent*** means the amount of money paid to an employee with a domestic partner in lieu of providing benefits to the employee's domestic partner. The cash equivalent is equal to the employer's direct expense of providing benefits to an employee for his or her spouse.

The cash equivalents of the following benefits apply:

a. For bereavement leave, cash payment for the number of days that would be allowed as paid time off for the death of a spouse. Cash payment would be in the form of the wages of the domestic partner employee for the number of days allowed.

b. For health benefits, the cost to the contractor of the contractor's share of the single monthly premiums that are being paid for the domestic partner employee, to be paid on a regular basis while the domestic partner employee maintains such insurance in force for himself or herself.

c. For family medical leave, cash payment for the number of days that would be allowed as time off for an employee to care for a spouse who has a serious health condition. Cash payment would be in the form of the wages of the domestic partner employee for the number of days allowed.

(4) ***Contract*** means any written agreement, purchase order, standing order or similar instrument entered into pursuant to the award of a bid whereby the city is committed to expend or does expend funds in return for work, labor, professional services, consulting services, supplies, equipment, materials, construction, construction related services or any combination of the foregoing.

(5) ***Contractor*** means any person or persons, sole proprietorship, partnership, joint venture, corporation, or other form of doing business, that is awarded a bid and enters into a covered contract with the city, and which maintains five (5) or more full-time employees.

(6) ***Covered contract*** means a contract between the city and a contractor awarded subsequent to the date when this section becomes effective valued at over twenty thousand dollars ($20,000).

(7) ***Domestic partner*** shall mean any two adults of the same or different sex, who have registered as domestic partners with a governmental body pursuant to state

or local law authorizing such registration, or with an internal registry maintained by the employer of at least one of the domestic partners. A contractor may institute an internal registry to allow for the provision of equal benefits to employees with domestic partner who do not register their partnerships pursuant to a governmental body authorizing such registration, or who are located in a jurisdiction where no such governmental domestic partnership registry exists. A contractor that institutes such registry shall not impose criteria for registration that are more stringent than those required for domestic partnership registration by the City of Key West pursuant to Chapter 38, Article V of the Key West Code of Ordinances.

(8) ***Equal benefits*** mean the equality of benefits between employees with spouses and employees with domestic partners, and/or between spouses of employees and domestic partners of employees.

(b) Equal benefits requirements.

(1) Except where otherwise exempt or prohibited by law, a Contractor awarded a covered contract pursuant to a bid process shall provide benefits to domestic partners of its employees on the same basis as it provides benefits to employees' spouses.

(2) All bid requests for covered contracts which are issued on or after the effective date of this section shall include the requirement to provide equal benefits in the procurement specifications in accordance with this section.

(3) The city shall not enter into any covered contract unless the contractor certifies that such contractor does not discriminate in the provision of benefits between employees with domestic partners and employees with spouses and/or between the domestic partners and spouses of such employees.

(4) Such certification shall be in writing and shall be signed by an authorized officer of the contractor and delivered, along with a description of the contractor's employee benefits plan, to the city's procurement director prior to entering into such covered contract.

(5) The city manager or his/her designee shall reject a contractor's certification of compliance if he/she determines that such contractor discriminates in the provision of benefits or if the city manager or designee determines that the certification was created, or is being used for the purpose of evading the requirements of this section.

(6) The contractor shall provide the city manager or his/her designee, access to its records for the purpose of audits and/or investigations to ascertain compliance with the provisions of this section, and upon request shall provide evidence that the contractor is in compliance with the provisions of this section upon each new bid, contract renewal, or when the city manager has received a complaint or has reason to believe the contractor may not be in compliance with the provisions of this section. This shall include but not be limited to providing the city manager or

his/her designee with certified copies of all of the contractor's records pertaining to its benefits policies and its employment policies and practices.

(7) The contractor may not set up or use its contracting entity for the purpose of evading the requirements imposed by this section.

(c) Mandatory contract provisions pertaining to equal benefits. Unless otherwise exempt, every covered contract shall contain language that obligates the contractor to comply with the applicable provisions of this section. The language shall include provisions for the following:

(1) During the performance of the covered contract, the contractor certifies and represents that it will comply with this section.

(2) The failure of the contractor to comply with this section will be deemed to be a material breach of the covered contract.

(3) If the contractor fails to comply with this section, the city may terminate the covered contract and all monies due or to become due under the covered contract may be retained by the city. The city may also pursue any and all other remedies at law or in equity for any breach.

(4) If the city manager or his designee determines that a contractor has set up or used its contracting entity for the purpose of evading the requirements of this section, the city may terminate the covered contract.

(d) Enforcement. If the contractor fails to comply with the provisions of this section:

(1) The failure to comply may be deemed to be a material breach of the covered contract; or

(2) The city may terminate the covered contract; or

(3) Monies due or to become due under the covered contract may be retained by the city until compliance is achieved; or

(4) The city may also pursue any and all other remedies at law or in equity for any breach;

(5) Failure to comply with this section may also subject contractor to the procedures set forth in Division 5 of this article, entitled "Debarment of contractors from city work."

(e) Exceptions and waivers.

The provisions of this section shall not apply where:

(1) The contractor does not provide benefits to employees' spouses.

(2) The contractor is a religious organization, association, society or any non-profit charitable or educational institution or organization operated, supervised or controlled by or in conjunction with a religious organization, association or society.

(3) The contractor is a governmental entity.

(4) The sale or lease of city property.

(5) The provision of this section would violate grant requirement, the laws, rules or regulations of federal or state law (for example, The acquisition services procured pursuant to Chapter 287.055, Florida Statutes known as the "Consultants' Competitive Negotiation Act").

(6) Provided that the contractor does not discriminate in the provision of benefits, a contractor may also comply with this section by providing an employee with the cash equivalent of such benefits, if the city manager or his/her designee determines that either:

a. The contractor has made a reasonable yet unsuccessful effort to provide equal benefits. The contractor shall provide the city manager or his/her designee with sufficient proof of such inability to provide such benefit or benefits which shall include the measures taken to provide such benefits or benefits and the cash equivalent proposed, along with its certificate of compliance, as is required under this section.

(7) The city commission waives compliance of this section in the best interest of the city, including but not limited to the following circumstances:

a. The covered contract is necessary to respond to an emergency.
b. Where only one bid response is received.
c. Where more than one bid response is received, but the bids demonstrate that none of the bidders can comply with the requirements of this section.

(f) City's authority to cancel contract. Nothing in this section shall be construed to limit the city's authority to cancel or terminate a contract, deny or withdraw approval to perform a subcontract or provide supplies, issue a non-responsibility finding, issue a non-responsiveness finding, deny a person or entity prequalification, or otherwise deny a person or entity city business.

(g) Timing of application. This section shall be applicable only to covered contracts awarded pursuant to bids which are after the date when this section becomes effective.

ANTI-KICKBACK AFFIDAVIT

STATE OF FLORIDA)
: SS
COUNTY OF Monroe)

I, the undersigned hereby duly sworn, depose and say that no portion of the sum herein bid will be paid to any employees of the City of Key West as a commission, kickback, reward or gift, directly or indirectly by me or any member of my firm or by an officer of the corporation.

By: Sandra Walters
Sandra Walters

Sworn and subscribed before me this

30th Day of JUNE, 2014.

NANCY L. MISCHKA
Nancy L. Mischka
NOTARY PUBLIC, State of Florida at Large

NANCY L. MISCHKA
Notary Public - State of Florida
My Comm. Expires Jan 17, 2016
Commission # EE 149044
Bonded Through National Notary Assn.

My Commission Expires: 1/17/2016

SWORN STATEMENT UNDER SECTION 287.133(3)(a)
FLORIDA STATUTES, ON PUBLIC ENTITY CRIMES

THIS FORM MUST BE SIGNED IN THE PRESENCE OF A NOTARY PUBLIC OR OTHER OFFICE AUTHORIZED TO ADMINISTER OATHS.

1. This sworn statement is submitted with Bid, Bid or Contract No. 14-004 for Environmental Engineering Services & Coastal Engineering Services

2. This sworn statement is submitted by SWC (Sandra Walters Consultants, Inc.)
(Name of entity submitting sworn statement)

whose business address is 6410 5th Street, Suite 3, Key West, FL 33040

and (if applicable) its Federal Employer Identification Number (FEIN) is 65-0975585 (If the entity has no FEIN, include the Social Security Number of the individual signing this sworn statement.)

3. My name is Sandra Walters and my relationship to
(Please print name of individual signing)

the entity named above is President.

4. I understand that a "public entity crime" as defined in Paragraph 287.133(1)(g), Florida Statutes, means a violation of any state or federal law by a person with respect to and directly related to the transaction of business with any public entity or with an agency or political subdivision of any other state or with the United States, including but not limited to, any Bid or contract for goods or services to be provided to any public entity or an agency or political subdivision of any other state or of the United States and involving antitrust, fraud, theft, bribery, collusion, racketeering, conspiracy, material misrepresentation.

5. I understand that "convicted" or "conviction" as defined in Paragraph 287.133(l)(b), Florida Statutes, means a finding of guilt or a conviction of a public entity crime, with or without an adjudication guilt, in any federal or state trial court of record relating to charges brought by indictment information after July 1, 1989, as a result of a jury verdict, nonjury trial, or entry of a plea of guilty or nolo contendere.

6. I understand that an "affiliate" as defined in Paragraph 287.133(1)(a), Florida Statutes, means

   1. A predecessor or successor of a person convicted of a public entity crime: or

   2. An entity under the control of any natural person who is active in the management of t entity and who has been convicted of a public entity crime. The term "affiliate" includes those officers, directors, executives, partners, shareholders, employees, members, and agents who are active in the management of an affiliate. The ownership by one person of shares constituting controlling interest in another person, or a pooling of equipment or income among persons when not for fair market value under an arm's length agreement, shall be a prima facie case that one person controls another person. A person who knowingly enters into a joint venture with a person who has been convicted of a public entity crime in Florida during the preceding 36 months shall be considered an affiliate.

7. I understand that a "person" as defined in Paragraph 287.133(1)(8), Florida Statutes, means any natural

person or entity organized under the laws of any state or of the United States with the legal power to enter into a binding contract and which Bids or applies to Bid on contracts for the provision of goods or services let by a public entity, or which otherwise transacts or applies to transact business with a public entity. The term "person" includes those officers, directors, executives, partners, shareholders, employees, members, and agents who are active in management of an entity.

8. Based on information and belief, the statement, which I have marked below, is true in relation to the entity submitting this sworn statement. (Please indicate which statement applies.)

_X_ Neither the entity submitting this sworn statement, nor any officers, directors, executives, partners, shareholders, employees, members, or agents who are active in management of the entity, nor any affiliate of the entity have been charged with and convicted of a public entity crime subsequent to July 1, 1989.

___ The entity submitting this sworn statement, or one or more of the officers, directors, executives, partners, shareholders, employees, members, or agents who are active in management of the entity, or an affiliate of the entity has been charged with and convicted of a public entity crime subsequent to July 1, 1989, AND (Please indicate which additional statement applies.)

___ There has been a proceeding concerning the conviction before a hearing of the State of Florida, Division of Administrative Hearings. The final order entered by the hearing officer did not place the person or affiliate on the convicted vendor list. (Please attach a copy of the final order.)

___ The person or affiliate was placed on the convicted vendor list. There has been a subsequent proceeding before a hearing officer of the State of Florida, Division of Administrative Hearings. The final order entered by the hearing officer determined that it was in the public interest to remove the person or affiliate from the convicted vendor list. (Please attach a copy of the final order.)

___ The person or affiliate has not been put on the convicted vendor list. (Please describe any action taken by or pending with the Department of Environmental Services.)

Sandra Walters
(Signature)

June 30, 2014
(Date)

STATE OF FLORIDA

COUNTY OF MONROE

PERSONALLY APPEARED BEFORE ME, the undersigned authority,

SANDRA WALTERS who, after first being sworn by me, affixed his/her signature in the
(Name of individual signing)

space provided above on this 30th day of JUNE, 2014.

1-17-16
My commission expires:
NOTARY PUBLIC

Nancy L. Mischka
NANCY L. MISCHKA

NANCY L. MISCHKA
Notary Public - State of Florida
My Comm. Expires Jan 17, 2016
Commission # EE 149044
Bonded Through National Notary Assn.

EQUAL BENEFITS FOR DOMESTIC PARTNERS AFFIDAVIT

STATE OF FLORIDA)
: SS
COUNTY OF Monroe)

I, the undersigned hereby duly sworn, depose and say that the firm of SWC (Sandra Walters Consultants, Inc.) provides benefits to domestic partners of its employees on the same basis as it provides benefits to employees' spouses per City of Key West Ordinance Sec. 2-799.

By: Sandra Walters
Sandra Walters

Sworn and subscribed before me this

30th Day of June, 2014.

NANCY L. MISCHKA

Nancy L. Mischka
NOTARY PUBLIC, State of Florida at Large

My Commission Expires: 1/17/2016

NANCY L. MISCHKA
Notary Public - State of Florida
My Comm. Expires Jan 17, 2016
Commission # EE 149044
Bonded Through National Notary Assn.

APPENDIX D
BVNA ISO 9001:2008 CERTIFICATE AND GENERIC CERTIFICATE OF INSURANCE

Certificate of Registration

QUALITY MANAGEMENT SYSTEM – ISO 9001:2008

This is to certify that:

Bureau Veritas
67/71, Boulevard du Château
92200 Neuilly-sur-Seine
France

Holds Certificate No: **FS 34143**

and operates a Quality Management System which complies with the requirements of ISO 9001:2008 for the following scope:

Please see scope pages from 2 to 13.

For and on behalf of BSI:

Gary Fenton, Global Assurance Director

Originally registered: 21/05/1996 Latest Issue: 08/04/2013 Expiry Date: 31/01/2016

...making excellence a habit.™

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Information and Contact: BSI, Kitemark Court, Davy Avenue, Knowlhill, Milton Keynes MK5 8PP. Tel: +44 845 080 9000
BSI Assurance UK Limited, registered in England under number 7805321 at 389 Chiswick High Road, London W4 4AL, UK.
A Member of the BSI Group of Companies.

Certificate No: FS 34143

Registered scope:

- MARINE & OFFSHORE DIVISION

Classification of ships, offshore units and marine & offshore equipments.
Conformity assessment of marine & offshore equipments.
In-Service surveys and verifications.
R&D, Consulting and HSE management. Project & asset integrity management.
Certification, Training.
Management of Safety of Surveyors.

- INDUSTRY

Conformity assessment of industrial equipment and installations to regulatory or client specifications from feasibility stage to de-commissioning.
Services include design review, shop inspection, site inspection, asset integrity management, product certification, training and related testing services such as non-destructive testing.

- INSPECTION & IN-SERVICE VERIFICATIONS (IVS)

Periodic inspection of equipment and installations to assess conformity with regulations or client-specific requirements as well as related training. Services apply to electrical installations, fire safety systems, lifts, pressure and lifting equipment and machinery.

- HEALTH, SAFETY AND ENVIRONMENT (HSE)

Inspection, audit, measurement, compliance and testing services in the areas of environment and health and safety. Technical assistance services and training to help companies define their HSE management strategy and organisation.

- CONSTRUCTION

Conformity assessment of construction projects, including infrastructures, to local regulations, contractual requirements and construction standards, from design stage to completion, construction, commissioning, operation, and decommissioning.
Services include design review, code compliance, technical control, work management, technical assistance on-site health and safety coordination, testing of construction materials, geotechnics, asset management, technical due diligence services and training.

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Certificate No: FS 34143

Registered scope:

- COMMODITIES *

Commodities inspection and testing for Oil & Petrochemicals, Metals & Minerals, Agri-food.
Oil & Petrochemicals: Trade inspections of cargoes, Laboratory testing of products, Blending and cargo treatment.
Metals & Minerals for Coal, non ferrous metals, steel raw materials, precious metals; Supervision of weighing; Sampling; Pre-shipment inspections; Load and discharge inspections. Testing of exploration samples, grade control, mineral processing testing, outsourcing of mine-site laboratories.
Agro-food services; Agro-commodities testing, Food safety (testing with analyses), Quality and quantity determination for fertilizers.

- CONSUMER PRODUCTS (CPS)

Testing, inspection and certification of consumer goods including textile, hardlines, toys, electrical and electronics.
Factory audits, social responsibility audits and training services.

- GOVERNMENT SERVICES AND INTERNATIONAL TRADE (GSIT)

Government Services: Pre-shipment inspection, Community single windows, X-Ray scanning, verification of conformity.
International Trade: Weight, quantity, quality inspection of commodities (agricultural, mineral, oil) including inspection of transport means and issuance of LCI (LOAD COMPARTMENT INSPECTION),
automotive services, food laboratory testing, pre-shipment inspection.

Other Bureau Veritas Group Companies:

Bureau Veritas, BV CPS, Unitek Technical Services, LCIE, CEP Industrie, BIVAC International,
Tecnitas, Curtis Straus, Rinave, Risk Control, CCI, ECA, BV Iberia,
Servicontrol, Payma Cotas, Payma Cotas Levante, Payma Cotas Extremadura, Payject XXI, Bureau Veritas Formación,
CESMEC S.A., Geoanalitica S.A, Chemtox-Trotters, Amdel, BV-Fairweather, ECS, Bureau Veritas Laboratoires,
Scientige, ECS Emission Fugitive and ECS Nucléaire, Arcalia and Atomic Technology. Inspectorate*

(*) For specified locations only. See details in the Location and Registered Activities section.

Miscellaneous:
Government contracts activities in all locations covered by this certificate are in compliance with the International Federation of Inspection Agencies (IFIA) Preshipment Inspection (PSI) Code of Practice.

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Location	Registered Activities
Bureau Veritas 21 bis Mohamed Semani Hydra 16035 Algiers Algeria	North Africa District. Algeria, Morocco, Tunisia. The activities at these locations are within the Registered Scope for the part detailed on page 2 & 3 of this certificate.
Bureau Veritas Rua Joao de Barros, N° 56 Bairro das Ingombotas Luanda Angola	Angola. The activities at this location are within the Registered Scope for the part detailed on page 2 & 3 of this certificate.
Bureau Veritas Argentina S.A. 8th and 9th Floor Av. Leandro N. Alem 1134 1041AAN Buenos Aires Argentina	Argentina The activities at this location are within the Registered Scope for the part detailed on page 2 & 3 of this certificate.
Inspectorate Argentina S.R.L Sarmiento 1113, 4th floor CP 1041- Buenos Aires Argentina	Argentina, Paraguay, Uruguay. Sites in Argentina : San Lorenzo, La Plata, Dock Sud, Comodoro Rivadavia, Campana, Bahia Blanca, San Nicolás de los Arroyos and Villa Dominico. Filial Paraguay at Asunción 1805. Filial Uruguay at Montevideo 11000. The activities at these locations are within the registered scope for the part detailed on page 2 & 3 of this certificate, including Commodities services and also calibration services of storage tanks and measurement equipment; inspection of industrial products and capital goods.
Bureau Veritas Unit 3, 435 Williamstown Rd Port Melbourne 3207 Victoria Australia	Pacific Zone. Australia and New Zealand The activities at this location are within the Registered Scope for the part detailed on page 2 & 3 of this certificate, including Commodities services.
Bureau Veritas Soc. Classificadora e Certificadora Ltda Praça Pio X/17 - 9E Andar Centro CEP: 20040-020 Rio de Janeiro Brazil	Brazil. The activities at this location are as the Registered Scope for the part concerned detailed on pages 2 & 3 of this certificate.

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Location	Registered Activities
Inspectorate Brazil Santos Head Office Av. Senador Feijo, 733 Vila Mathias – Santos São Paulo 11015-505 Brazil	Santos site. The activities at this location are as the Registered Scope for the part concerned detailed on pages 2 & 3 of this certificate, including Commodities services.
Bureau Veritas Av. Marathon, 2595 Macul - Santiago 7810552 Chile	South Latin America Region Chile, Peru, Argentina. The activities at these locations are within the Registered Scope for the part detailed on page 2 & 3 of this certificate, including Commodities services. Additional scope for CESMEC: Technical Inspections, Technical Consulting, Engineering Appraisal, Lab Analysis & Testing, Metrological Calibrations and Environmental Services. All activities at nationwide level. Additional scope for Geoanalítica Ltd: Automated preparation of mineral samples, Fire assay of mineral samples, Mineral standards preparation and inter-laboratory evaluations organization. All activities at nationwide level.
Bureau Veritas consulting (Shanghai) Co., Ltd Room 2, 8/F Building No. 8 Pudong Lujiazui Software Park, No. 120, Lane 91, E Shan Road Shanghai 200127, P.R.C China	Greater China. The activities at this location are within the Registered Scope for the part detailed on page 2 & 3 of this certificate.
Bureau Veritas quality services (Shanghai) Co., Ltd Room 1, 8/F Building No. 8 Pudong Lujiazui Software Park, No. 120, Lane 91, E Shan Road Shanghai 200127, P.R.C. China	Greater China. The activities at this location are within the Registered Scope for the part detailed on page 2 & 3 of this certificate.

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Location	Registered Activities
BV-Fairweather Inspection & Consultants (Shenzhen) Co., Ltd 22G, Seaview Square, Taizi Road, Shekou, Shenzhen 518067, P.R.C China	Greater China. The activities at this location are within the Registered Scope for the part detailed on page 2 & 3 of this certificate.
Bureau Veritas Edificio Corfinsura Calle 72 N° 7-82, piso 3 Bogota DC 11001000 Colombia	North Latín America Region Colombia, Ecuador, Venezuela, Mexico, Cuba, Panama. The activities at these locations are within the Registered Scope for the part detailed on page 2 & 3 of this certificate.
Bureau Veritas Oestbanegade 55 2nd floor Copenhagen DK 2100 Denmark	Nordic and Baltic District. Denmark, Norway, Sweden, Finland, Estonia, Latvia, Lithuania. The activities at these locations are within the Registered Scope for the part detailed on page 2 & 3 of this certificate and also fire safety, Consultancy and training within handling and storage of dangerous goods and chemicals. Sales of software tools and equipment.
Bureau Veritas CPS France Rue John Hadley BP 20431 59658 Villeneuve d'Ascq Cedex France	Consumer Products (CPS) – European Zone. Including all CPS locations in the following countries belonging to the European Zone: France, Germany, UK, Turkey. The activities at these locations are as the Registered Scope for the part concerned detailed on pages 2 & 3 of this certificate.
LCIE 33 avenue du Général Leclerc 92260 Fontenay aux Roses France	Certification and testing of electrical and electronic products and related products.
Bureau Veritas 67/71, Boulevard du Château 92200 Neuilly-sur-Seine France	Head Office. Industry & Facilities, Marine, Government Services and International Trade. Marine Operations: Worldwide for verticalised and non-verticalised countries. GSIT Operations: Worldwide covering representative offices and all subsidiaries. Support functions. The activities at this location are as the Registered Scope for the part concerned detailed on pages 2 & 3 of this certificate.

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Location	Registered Activities
Bureau Veritas Bâtiment Antarès 2, Rue Marcel Doret 31702 Blagnac France	Aéronautique – Espace. Toulouse, Puteaux, Villepinte, Elysées Conseil. Aviation Safety Audit. Aircraft Technical Expertise. Assistance to regulatory conformance. Regulatory monitoring on behalf of Authority. Assistance to continuous airworthiness management. Assistance to Safety & Security conformance. Aerospace regulatory and Quality Training. Technical Publications.
Bureau Veritas CEP Industrie ZA des Béthunes 13/15 rue d'Anjou 95310 Saint Ouen l'Aumône France	Saint Ouen l'Aumône, Brignais, Bollène, La Hague Beaumont. Measurements, experts reports of any material, non-destructive testing and inspection.
Bureau Veritas Parc d'activité Actipolis 40, Av. Ferdinand de Lesseps 33610 Canejan Bordeaux France	Région Sud Ouest. Agence Aquitaine / Charentes. Agence Midi Pyrénées / Languedoc Roussillon. The activities at these locations are within the Registered Scope for the part detailed on page 2 & 3 of this certificate.
Bureau Veritas 16, Chemin du Jubin 69571 Dardilly Cedex Lyon France	Région Sud Est. Pôle territorial Auvergne. Agence Métropole Lyon. Agence Métropole Méditerranée. Agence Savoie Dauphiné. The activities at these locations are within the Registered Scope for the part detailed on page 2 & 3 of this certificate.
Bureau Veritas 66, Rue de Villiers 92300 Levallois-Perret France	Direction Générale Zone France Direction Outremer et Filiales. Agence Pacifique Sud. Agence Antilles/Guyane. Agence Océan Indien. Arcalia France SSICOOR. The activities at these locations are within the Registered Scope for the part detailed on page 2 & 3 of this certificate.

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Location	Registered Activities:
Bureau Veritas 8, Avenue Jacques Cartier Atlantis 44800 Saint-Herblain Nantes France	Région Nord Ouest. Agence Centre. Agence Normandie. Agence Métropole Rennes/Nantes. Pôle territorial Bretagne. The activities at these locations are within the Registered Scope for the part detailed on page 2 & 3 of this certificate.
Bureau Veritas 4, rue du Parc Oberhausbergen 67088 Strasbourg Cedex France	Région Nord Est. Agence Métropole Nord/Pas-de-Calais/Picardie Agence Champagne/Ardennes. Agence Alsace. Agence Lorraine. Agence Bourgogne/Franche Comté. The activities at these locations are within the Registered Scope for the part detailed on page 2 & 3 of this certificate.
Bureau Veritas Immeuble Quadrium Sud 17, rue Louise Dory Cedex 60015 93231 Romainville Cedex France	Région Ile de France. Agence Ile de France Construction Agence Inspection Grand Paris IVS (92/75/93/94) Agence Inspection Grande Couronne IVS (91/78/95/77) Agence Ile de France Gestion Patrimoine. Agence Ile de France Contrats Nationaux DRS Agence Ile de France HSE. The activities at these locations are within the Registered Scope for the part detailed on page 2 & 3 of this certificate.
Bureau Veritas 66, rue de Villiers 92300 Levallois-Perret France	Département Industrie Agences Industrie IdF - Grand Centre, Sud Est, Nord Est Agence Centre Technique Industrie Agence Nucléaire Pôles Nord Ouest, Sud Ouest, Nord Pas de Calais, Agence Emissions Fugitives Agence Procurement et Sourcing Agence Laboratoires Agence CND / EDF The activities at these locations are within the Registered Scope for the part detailed on page 2 & 3 of this certificate.

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Location	Registered Activities:
Bureau Veritas Laboratoires 66, rue de Villiers 92 300 Levallois-Perret France	Pessac, Belfort, Villars, Saint Ouen L'Aumone Analyses, measurements, tests, experts reports of any material.
Bureau Veritas Département Agro-alimentaire "Le Guillaumet" 60, avenue du Général de Gaulle 92046 Paris La Défense France	Puteaux, Bordeaux, Rennes, Nantes. Inspections, audits and training within food supply chain (poultry, meat, vegetables, seafood and fish farming, dairy and beverages).
Bureau Veritas Galeries de l'Esplanade BP 10005 Libreville Gabon	Central Africa District. Gabon, Cameroon, Congo, Guinea Equatorial.
Bureau Veritas Veritaskai 1 D-21079 Hamburg Germany	Central and Eastern Europe Region. Germany, Austria, Bulgaria, Czech Republic, Croatia, Hungary, Poland, Serbia, Slovenia, Slovakia, Switzerland. The activities at these locations are within the Registered Scope for the part detailed on page 2 & 3 of this certificate.
Bureau Veritas Etolikou 23 18545 Piraeus Greece	Marine, I&F, GSIT The activities at these locations are within the Registered Scope for the part detailed on page 2 & 3 of this certificate.
Bureau Veritas 7th Floor Octa Tower 8 Lam Chak Street Kowloon Bay Kowloon Hong Kong	Consumer Products (CPS) – Asia Zone. Including all CPS locations in the following countries belonging to the Asia zone : China, Taiwan, Hong Kong, Vietnam, Sri Lanka, India, Pakistan, Bangladesh, Indonesia, Singapore, Thailand. The activities at these locations are as the Registered Scope for the part concerned detailed on pages 2 & 3 of this certificate
Bureau Veritas Marwah Centre, 6th Floor Opp.Ansa Indl. Est,Off Saki Vihar Road. Krishanlal Marwah Marg, Mumbai 400 072 India	South Asia Region. India, Bangladesh, Sri Lanka, Pakistan. The activities at these locations are within the Registered Scope for the part detailed on page 2 & 3 of this certificate.

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Location	Registered Activities:
Bureau Veritas Via Miramare 15, 20 126 Milano Italy	Italy. The activities at this location are as the Registered Scope for the part concerned detailed on pages 2 & 3 of this certificate (excluding the technical assistance on-site health and safety coordination_in construction).
Bureau Veritas (face Hôtel Ibis Plateau) Bd Roume Angle rue Thomasset Abidjan Ivory Coast	West Africa District. Ivory Coast, Senegal, Mauritania, Mali, Nigeria, Ghana, Benin, Guinea Conakry, The activities at these locations are as the Registered Scope for the part concerned detailed on pages 2 & 3 of this certificate.
Bureau Veritas 2nd Floor, Silk Bldg 1 Yamashita-Cho, Naka-ku Yokohama Kanagawa 231-0023 Japan	North-East Asia Region Japan, South Korea. The activities at this location are as the Registered Scope for the part concerned detailed on pages 2 & 3 of this certificate.
Bureau Veritas (M) Sdn Bhd Level 11, Menara Dayabumi Jalan Sultan Hishamuddin, 50550 Kuala Lumpur, Malaysia	South East Asia Region (SEA). Brunei, Cambodia, Indonesia, Malaysia, Thailand, Singapore, Vietnam. The activities at these locations are within the Registered Scope for the part detailed on page 2 & 3 of this certificate.
Bureau Veritas Avenida Ejercito Nacional Nr 418, 1 piso Colonia chapultepec Morales 11570 Mexico D.F. Mexico	Mexico, Cuba, Panama. The activities at these locations are as the Registered Scope for the part concerned detailed on pages 2 & 3 of this certificate.
Bureau Veritas Visserdijk 223-241 3011 GW Rotterdam Netherlands	Benelux District Netherlands, Belgium The activities at these locations are within the Registered Scope for the part detailed on page 2 & 3 of this certificate.

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Location	Registered Activities:
Bureau Veritas Pólo Tecnológico de Lisboa, LT21 LISBOA 1600-485 Portugal	Portugal. The activities at this location are within the Registered Scope for the part detailed on page 2 & 3 of this certificate.
Inspectorate Services Perú SAC Parque Industrial del Calao Calle Omega 267 Lima Perú	The activities at these locations are within the Registered Scope for the part detailed on page 2 & 3 of this certificate, including Commodities services and also provision of metals and minerals inspection, testing and certification services; agriculture, fishery and foods inspection, testing and certification services; environmental testing services; industrial inspection, testing, and certification services; personnel awareness certification for industrial; hydrocarbons and chemical products inspection and certification services.
Bureau Veritas Romania Control International SRL Brailei street, no. 165-B, 5th floor 800 310 Galati Romania	Marine, I&F and GSIT. The activities at this location are within the Registered Scope for the part detailed on page 2 & 3 of this certificate.
Bureau Veritas Nab. Akademika Tupoleva 15 korp. 2 "Tupolev Plaza" Moscow 105005 Russian Federation	Russia & Black Sea Region. Russia. The activities at this location are as the Registered Scope for the part concerned detailed on pages 2 & 3 of this certificate.
Bureau Veritas Summit Office Park, 1st floor 495 Summit Road Morningside, Sandton 652097 - 2010 Johannesburg South Africa	South and East Africa District. South Africa, Kenya. The activities at these locations are as the Registered Scope for the part concerned detailed on pages 2 & 3 of this certificate.
ECA Parque Empresarial A-7 Av. Can Fatjo Dels Aurons nº9 Edifici Palausibaris 08174 Sant Cugat Del Vallès Barcelona Spain	Galicia, Asturias, Cantabria, Pais Vasco, Navarra, La Rioja, Aragon, Catalunya, Baleares, Castilla y Leon, Madrid, Castilla La Mancha, Comunidad Valenciana, Murcia, Extremadura, Andalucia, Canarias. The activities at these locations are within the Registered Scope for the part detailed on page 2 & 3 of this certificate.

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Location	Registered Activities:
Bureau Veritas Iberia Valportillo Primera, 22-24 Edificio Caoba. Pol. Industrial La Granja 28108 Alcobendas Madrid Spain	Zone Head Office. Galicia, Asturias, Cantabria, Pais Vasco, Navarra, Aragon, Catalunya, Baleares, Castilla y Leon, Madrid, Castilla La Mancha, Comunidad Valenciana, Murcia, Extremadura, Andalucia, Canarias. The activities at these locations are within the Registered Scope for the part detailed on page 2 & 3 of this certificate.
Paymacotas Parque Empresarial A-7 Av. Can fatjo dels Aurons n°9 Edifici Palausibaris 08174 Sant Cugat Del Valles Barcelona Spain	Galicia, Asturias, Cantabria, Aragon, Catalunya, Madrid, Comunidad Valenciana, Extremadura, Andalucia. The activities at these locations are within the Registered Scope for the part detailed on page 2 & 3 of this certificate and also Infrastructures: Comprehensive services. Consultancy of civil work. Geotechnical and geological engineering. Construction materials tests. Training.
Payject XXI Parque Empresarial A-7 Av. Can fatjo dels Aurons n°9 Edifici Palausibaris 08174 Sant Cugat Del Vallès Barcelona Spain	Catalunya. The activities at this location are within the Registered Scope for the part detailed on page 2 & 3 of this certificate and also Infrastructures: Comprehensive services. Consultancy of civil work. Geotechnical and geological engineering. Training.
Servicontrol Valportillo Primera, 22-24 Edificio Caoba. Pol. Industrial La Granja 28108 Alcobendas Madrid Spain	Galicia, Asturias, Pais Vasco, Catalunya, Madrid, Murcia, Extremadura, Andalucia. The activities at these locations are within the Registered Scope for the part detailed on page 2 & 3 of this certificate.
Bureau Veritas formación, s.a Valportillo Primera nº 22-24 Edificio Caoba. Pol. Industrial La Granja 28108 Alcobendas Madrid Spain	Business School, E-learning courses, In-company Programs.

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Location	Registered Activities:
Bureau Veritas Gozetim Hizmetleri Ltd. Sti Centrum Ticaret Merkezi Aydinevler Sanayi Cad. N° 3 34854 Kucukyali - Maltepe Istanbul Turkey	Turkey & Caspian Sea Region. Azerbaijan, Kazakhstan, Kyrgyzstan, Tajikistan, Turkey, Turkmenistan, Uzbekistan. The activities at these locations are within the Registered Scope for the part detailed on page 2 & 3 of this certificate.
Bureau Veritas Alzubara Tower First Floor (Peugeot Car Showroom) Al-Salam Street 26264 Abu Dhabi UAE	Middle East Region. Bahrain, Egypt, Iran, Iraq, Jordan, Kuwait, Lebanon, Libya, Oman, Qatar, Saudi Arabia, Syria, UAE, Yemen. The activities at these locations are within the Registered Scope for the part detailed on page 2 & 3 of this certificate.
Bureau Veritas Street Komintema, 28 01032 Kiev Ukraine	Black Sea District. Ukraine, Belarus, Moldova, Armenia, Georgia. The activities at these locations are as the Registered Scope for the part concerned detailed on pages 2 & 3 of this certificate.
Bureau Veritas Brandon House 180 Borough High Street London SE1 1LB United Kingdom	The activities at this HO location and all locations in UK are as the Registered Scope for the part concerned detailed on pages 2 & 3 of this certificate.
Bureau Veritas North America 1601 Sawgrass Corporate Parkway, Suite 400 Fort Lauderdale Florida 33323 USA	Business Lines. HSE, FACILITIES, IND, IND-One CIS and ELEVATORS-NEIS The activities at these locations are as the Registered Scope for the part concerned detailed on pages 2 & 3 of this certificate.
Bureau Veritas Consumer Products Services Inc. 350 Myles Standish Boulevard Taunton Massachusetts 02780 USA	Consumer Products (CPS) – America's Zone. Including all CPS locations in the following countries belonging to the America's zone: USA, Mexico (Puebla), Guatemala. The activities at these locations are as the Registered Scope for the part concerned detailed on pages 2 & 3 of this certificate.

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CERTIFICATE OF LIABILITY INSURANCE

DATE(MM/DD/YYYY) 03/19/2014

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER
Aon Risk Services Northeast, Inc.
Aon Risk Services Northeast, Inc.
NY NY Office
199 Water Street
New York NY 10038-3551 USA

CONTACT NAME:
PHONE (A/C. No. Ext): 866-283-7122 **FAX (A/C. No.):** 800-363-0105
E-MAIL ADDRESS:

INSURED
Bureau Veritas North America, Inc.
1601 Sawgrass Corporate Parkway
Suite 400
Fort Lauderdale FL 33323 USA

	INSURER(S) AFFORDING COVERAGE	NAIC #
INSURER A:	AXA Insurance Company	33022
INSURER B:	Commerce & Industry Ins Co	19410
INSURER C:	New Hampshire Ins Co	23841
INSURER D:	National Union Fire Ins Co of Pittsburgh	19445
INSURER E:	The Insurance Co of the State of PA	19429
INSURER F:	Granite State Insurance Company	23809

COVERAGES **CERTIFICATE NUMBER:** 570053161549 **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

Limits shown are as requested

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
D	X **COMMERCIAL GENERAL LIABILITY**			GL1721692	04/01/2014	01/01/2015	EACH OCCURRENCE	$1,000,000
	CLAIMS-MADE / X OCCUR						DAMAGE TO RENTED PREMISES (Ea occurrence)	$1,000,000
							MED EXP (Any one person)	$25,000
							PERSONAL & ADV INJURY	$1,000,000
	GEN'L AGGREGATE LIMIT APPLIES PER:						GENERAL AGGREGATE	$2,000,000
	POLICY / X PRO-JECT / X LOC						PRODUCTS - COMP/OP AGG	$2,000,000
	OTHER:							
D	**AUTOMOBILE LIABILITY**			CA 7030195 AOS	04/01/2014	01/01/2015	COMBINED SINGLE LIMIT (Ea accident)	$1,000,000
F	X ANY AUTO			CA 7030196 MA	04/01/2014	01/01/2015	BODILY INJURY (Per person)	
	ALL OWNED AUTOS / SCHEDULED AUTOS						BODILY INJURY (Per accident)	
	HIRED AUTOS / NON-OWNED AUTOS						PROPERTY DAMAGE (Per accident)	
B	X **UMBRELLA LIAB** / X OCCUR			BE011411634	04/01/2014	01/01/2015	EACH OCCURRENCE	$1,000,000
	EXCESS LIAB / CLAIMS-MADE						AGGREGATE	$1,000,000
	DED / X RETENTION $10,000							
C	**WORKERS COMPENSATION AND EMPLOYERS' LIABILITY**			WC013566200 AOS	04/01/2014	01/01/2015	X PER STATUTE / OTH-ER	
C	ANY PROPRIETOR / PARTNER / EXECUTIVE OFFICER/MEMBER EXCLUDED? Y / N: N **(Mandatory in NH)** If yes, describe under DESCRIPTION OF OPERATIONS below	N / A		WC013566201 NJ, PA	04/01/2014	01/01/2015	E.L. EACH ACCIDENT	$1,000,000
							E.L. DISEASE-EA EMPLOYEE	$1,000,000
							E.L. DISEASE-POLICY LIMIT	$1,000,000
A	Archit&Eng Prof			PCS00188414 SIR applies per policy terms & conditions	01/01/2014	01/01/2015	Each Claim	$1,000,000
							Aggregate	$1,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)
Evidence of Coverage.
The Architects & Engineers policy includes coverage for Professional Liability and Contractors Pollution Liability.

CERTIFICATE HOLDER

Bureau Veritas North America, Inc.
1601 Sawgrass Corporate Parkway
Suite 400
Fort Lauderdale, FL 33323 USA

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

Aon Risk Services Northeast, Inc.

Holder Identifier :

Certificate No : 570053161549

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AGENCY CUSTOMER ID: 570000048582
LOC #:

ADDITIONAL REMARKS SCHEDULE

AGENCY	NAMED INSURED
Aon Risk Services Northeast, Inc.	Bureau Veritas North America, Inc.
POLICY NUMBER: See Certificate Number: 570053161549	
CARRIER: See Certificate Number: 570053161549 / NAIC CODE:	EFFECTIVE DATE:

ADDITIONAL REMARKS

THIS ADDITIONAL REMARKS FORM IS A SCHEDULE TO ACORD FORM,
FORM NUMBER: ACORD 25 **FORM TITLE:** Certificate of Liability Insurance

INSURER(S) AFFORDING COVERAGE	NAIC #
INSURER	
INSURER	
INSURER	
INSURER	

ADDITIONAL POLICIES If a policy below does not include limit information, refer to the corresponding policy on the ACORD certificate form for policy limits.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFFECTIVE DATE (MM/DD/YYYY)	POLICY EXPIRATION DATE (MM/DD/YYYY)	LIMITS	
	WORKERS COMPENSATION							
C		N/A		WC013566202 MA, WI	04/01/2014	01/01/2015		
C		N/A		WC013566203 AZ,GA,VA	04/01/2014	01/01/2015		
D		N/A		WC013566204 CA	04/01/2014	01/01/2015		
C		N/A		WC013566205 IL,KY,NC,NH,UT,VT	04/01/2014	01/01/2015		
E		N/A		WC013566206 FL	04/01/2014	01/01/2015		
C		N/A		WC013566207 OR,ND,OH,WA,WY	04/01/2014	01/01/2015		

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APPENDIX E
KEY PERSONNEL RESUMES

Janet M. Peterson, P.G.

Senior Geologist

Education

A.B. Geology 1978
Franklin and Marshall College
Lancaster, Pennsylvania

Sc.M. Geological Sciences 1981
Brown University
Providence, Rhode Island

Registrations/Certifications

Florida Registered Professional Geologist # 91

Occupational Safety and Health Administration (OSHA) Hazardous Waste Operations and Emergency Response

(HAZWOPER) 40-hour training
Miami, Florida
1987

OSHA 8-Hour Refresher Training
Annual

Ms. Peterson has over 25 years of experience in the environmental assessment and remediation industry. Ms. Peterson has overseen assessment and remediation of a wide range of contaminated sites, including industrial sites, dry cleaners, petroleum, industrial, and wood-treating facilities, manufactured gas plants, electrical utility facilities, and golf courses.

Ms. Peterson's previous experience encompasses an in-depth knowledge of both private and public sector contracts as a Project Manager and Consulting Services Manager. In these positions, Ms. Peterson was intimately involved with operations related to management of contamination assessment and remediation projects. Ms. Peterson is an experienced and skilled negotiator with environmental regulatory agencies and has successfully managed projects with multiple stakeholders with varied interests.

Ms. Peterson has technical expertise in all areas of field services, report preparation, project implementation and project business management. Ms. Peterson's technical skills, expertise and experience range from small tasks to large, multi-task, time-sensitive projects.

Janet M. Peterson, P.G.

Project Experience

Site Assessment and Remediation

Arsenic

Ms. Peterson has conducted assessment, source removal, remediation, and monitoring for arsenic in soil and groundwater at numerous facilities in Florida, including golf courses and electrical substations. The projects have generally consisted of assessment of both soil and groundwater, source removal, and monitoring for natural attenuation.

Assessment, Source Removal, and Monitoring of the former Presidential Country Club Golf Course Maintenance Area in North Miami Beach, Florida: Conducted assessment surrounding a septic tank and mix-load area at the former maintenance area of a golf course that was redeveloped into a new golf course surrounded by residential housing. Conducted source removal in conjunction with redevelopment and obtained a No Further Action status with respect to arsenic in soil from the Miami-Dade County Department of Environmental Resources Management (DERM). No Further Action with Conditions for the portion of the golf course affected by former maintenance activities has been approved by DERM, now the Permitting, Environment, and Regulatory Affairs (PERA) Department. Existing covenants against groundwater use were utilized for both the residential house lots and the golf course .

Groundwater Assessment at the Marlins Ballpark (former Orange Bowl), Miami, Florida. Conducted assessment activities for arsenic in groundwater, which was detected during assessment prior to construction of drainage features for the ballpark. Coordinated monitoring well installation and sampling in the midst of a large, active construction site with a myriad of underground utilities. Construction activities affected subsurface conditions and increased groundwater turbidity. Successfully delineated the extent of an arsenic plume under difficult field conditions.

Assessment, Source Removal, Monitoring, and Conditional Closure of a portion of the golf course for the Palm Aire Country Club in Pompano Beach, Florida. Conducted site assessment and limited source removal to meet an alternative open space soil cleanup target level. Conducted assessment, monitoring, and source removal in conjunction with a Land Use Plan Amendment for the former golf course property. Assisted the client in negotiating a scope of work suitable for current use a vacant open space while making allowance for planned future land use change.

Assessment, Source Removal, Groundwater Remediation, Monitoring, and Engineering Controls for the Inverrary Golf Course Maintenance Area in Lauderhill, Florida: Conducted soil assessment and source removal of the former mix-load area, followed by delineation of the extent of arsenic in groundwater, which extends off-site in three directions. Utilized EHC-M™ amendment for groundwater remediation; active remediation monitoring is on-going. The goal of remediation is to shrink the extent of arsenic in groundwater to within property boundaries and obtain conditional closure for the maintenance area property. Soil contamination will be addressed by a combination of engineering controls (paving) and a deed restriction.

Assessment, Source Removal, and Monitoring for the Diplomat Country Club, Hallandale Beach, Florida. As a result of Broward County's requirement that golf courses to be redeveloped must undergo both a Phase I and a Phase II Environmental Site Assessment, arsenic was found in soil and groundwater in both the maintenance area and the golf course. Conducted soil and groundwater assessment and source removal in both the maintenance area and the golf course. Successfully applied a Site-Specific Alternative Soil Cleanup Target Level for the golf course to limit required source removal. Currently

working with Broward County to complete assessment in a cost-effective manner which does not require off-site delineation of arsenic in soil and groundwater.

Assessment and Groundwater Monitoring at Florida Power & Light Company (FPL) Electrical Substations in Miami-Dade County: Conducted soil and groundwater assessment and quarterly groundwater monitoring for arsenic in groundwater at six electrical substations.

Brownfields Redevelopment

Assessment and Remediation

Ms. Peterson has managed various projects for assessment and remediation in conjunction with redevelopment, as well as remediation at a petroleum bulk storage facility under a Brownfields Site Rehabilitation Agreement (BSRA).

Cleanup of the former Pike Utility water and wastewater treatment plant in Lake Worth, Florida conducted under a USEPA Brownfields Cleanup Grant. Prepared Analysis of Brownfields Cleanup Alternatives (ABCA), prepared Generic and Site-Specific Quality Assurance Project Plans (QAPPs), responsible for coordination of cleanup, and prepared reports for submittal and approval by the Florida Department of Environmental Protection. Also assisted grantee (Treasure Coast Regional Planning Council) with grant administration tasks. Currently working with the property owner (Palm Beach County) and the Treasure Coast Regional Planning Council to complete assessment, remediation, and obtain conditional closure for this property. Anticipated future use is as a passive park.

Development of Pioneer Gardens Affordable Housing in North Miami, Florida: Managed a multi-phase project consisting of assessment, source removal, and subsurface demolition of a former waste water treatment plant (WWTP) intended for development as affordable housing. Responsibilities included oversight of sample collection, report preparation, negotiations with the Miami-Dade DERM, meetings with the Community Redevelopment Agency (CRA), and appearances before the CRA advisory board and the city council. Also assisted the construction manager with coordination of various site activities related to assessment and source removal.

Brownfields Assessment and Remediation of the Siegel Oil Bulk Petroleum Storage Facility, Miami, Florida: Managed assessment and remediation of a petroleum bulk storage facility in Miami, Florida under a BSRA. Activities included assessment, design, installation, and operation of a groundwater pump and treat system, monitoring, and preparation of a No Further Action with Conditions proposal. Assessment and remediation were complicated by the age of the facility (originally constructed in the 1940s) and occasional petroleum discharges during bulk tank filling operations.

Member of the Brownfields Advisory Committee (BAC) for the Old Baltuff Dump site, Middle Torch Key, Florida, owned by Habitat for Humanity. As the Environmental Engineer on the BAC, Ms. Peterson guides the assessment and remediation process, which is funded by grant monies from the Florida Department of Environmental Protection and the United States Environmental Protection Agency. Ms. Peterson has prepared successful grant applications and assisted with preparation of a Brownfields Site Rehabilitation Agreement (BSRA). Active participant in BAC meetings, including working with representatives of nearby residents to educate them concerning the assessment and remediation process, as well as planning for future use of the dump.

Solvents

Janet M. Peterson, P.G.

Ms. Peterson has conducted assessment and remediation of chlorinated solvents at dry cleaners and industrial industries throughout Florida.

Assessment, Source Removal, and Monitoring at SiBon Dry Cleaner in the Suniland area of Miami-Dade County, Florida: Expert in the defense of a class action lawsuit brought by residential property owners against the owners and operators of four dry cleaners who were the alleged source of private drinking well contamination. Contamination was found to be associated with septic systems which served the strip shopping centers where the dry cleaners were located. Project included coordination of connection to sewer, proper abandonment of the septic system and removal of associated contamination, and one year of natural attenuation monitoring.

Assessment and Remediation of Former National Linen Industrial Laundry Facilities, Florida: Completed assessment, prepared and implemented Remedial Action Plans, and conducted monitoring for five former industrial laundry facilities located throughout Florida. These facilities generally had residual concentrations of contamination associated with underground storage tanks (USTs) that were abandoned in place. Supervised UST removal, conducted in-situ enhancement of natural bioremediation processes, followed by active remediation or natural attenuation monitoring.

Assessment and Remediation of the former Gator Plating Facility in Coral Springs, Florida: Conducted remediation and monitoring at a former plating facility located in northwestern Broward County, Florida. Remediation consisted on the enhancement of in-situ bio remediation, followed by monitoring. Groundwater monitoring is on-going; the property owner would like closure without any conditions.

Electrical Utilities

Ms. Peterson has assisted in emergency response actions and the coordination of source removal activities at FPL electrical substations. Ms. Peterson was also Project Manager for completion of assessment at a manufactured gas plant in Miami, Florida

Emergency Response Actions and Follow-up Assessment, Miami-Dade County, Florida: Provided oversight of assessment during clean-up and source removal actions taken in response to transformer fires or leaks at several substations in Miami-Dade and Broward Counties. Responsibilities included direction of source removal efforts, sample collection, report preparation, and interface with regulatory agencies. Once of these facilities involved a transformer that contained PCBs. Successfully obtained No Further Action from regulatory agencies for each incident.

Substation Lead Source Removal, FPL Substations throughout Florida: Assisted in the planning and execution of a state-wide effort to remove soils that contained RCRA-hazardous concentrations of lead. from around transformers. Source removal was conducted at a total of 87 substations. Prepared work plans for submittal to regulatory agencies and prepared a Source Removal Report for each substation after source removal was completed. Coordinated the effort to obtain regulatory approval for the source removal effort from agencies throughout the state, including the FDEP, the Broward County Environmental Protection Department (BCEPD), and the Miami-Dade County DERM.

Manufactured Gas Plant, Miami, Florida: Completed groundwater assessment at the former Miami Manufactured Gas Plant (MGP) in downtown Miami. Assessment was conducted for multiple parameters and extended off-site in several directions. The complex assessment was performed under a strict time schedule and a high level of regulatory oversight.

Industrial Facilities

Janet M. Peterson, P.G.

Ms. Peterson has been Project Manager for assessment and remediation of numerous industrial facilities in Florida. These projects involved a wide range of contaminants

Wood Treating Facilities: Conducted assessment at wood treating facilities in Broward County contaminated by pentachlorophenol (PCP). Completed the definition of the extent of PCP at the former Lindsley Lumber facility; remediation was conducted by the US Environmental Protection Agency (USEPA) when dioxins were detected in the groundwater. Project manager for source removal and assessment at Sun Bank parking lot, where a previously-unknown UST popped out of the ground during a rainstorm and discharged PCP.

Phthalate Esters: Conducted assessment, source removal, and remedial design for two facilities in Miami-Dade County that used plasticizers. Remedial design consisted of the combination of chemical oxidation and application of amendments to enhance bio remediation, and source removal.

Metals: Completed monitoring for natural attenuation and conditional closure at the former BF Goodrich aircraft landing gear repair facility at Miami International Airport (MIA). Implemented engineering controls and prepared a No Further Action with Conditions Proposal. This was the first facility at MIA that has achieved closure with conditions.

Storage Tank Assessment and Remediation

Assessment and Remediation

Ms. Peterson has been responsible for assessment and remediation at many petroleum-contaminated facilities in Florida. These facilities have included former gasoline stations and industrial facilities. The range of services has included UST removal, assessment, active remediation, and monitoring. Several of these facilities have been enrolled in the Florida Petroleum Preapproval Program.

Checkers Fast-Food Restaurants in Miami-Dade and Broward Counties, Florida: Provided oversight for removal of USTs, soakage pits, and other drainage structures at former gasoline stations that were redeveloped as fast food restaurants. Conducted oversight of contractors in the field and sample collection and provided coordination with regulatory agencies. Conducted full contamination assessment at one of these facilities and oversaw the design, installation, and operation of an active remediation system (air-sparging and soil vapor extraction). This facility was in the petroleum preapproval program.

Freedom Tower, Miami, Florida: Completed assessment and remedial design for petroleum contamination associated with a UST at an historical building in downtown Miami. The prior owner of the building defaulted on their loan; remedial design was conducted in conjunction with the sale of the building in order to determine remedial costs for a buyer.

Phase I and Phase II Environmental Site Assessments

File Review/Compliance

Ms. Peterson has conducted hundreds of Phase I Environmental Site Assessments (ESAs). Many of these were followed by Phase II ESAs, corrective actions conducted recommended based upon Phase II ESA findings, and occasionally by full assessment and remediation. Responsibilities included federal, state and local environmental regulatory record review, site reconnaissance, interviews and related Phase II assessment activities.

Janet M. Peterson, P.G.

Scott-Carver Homes Low-Income Housing Redevelopment, Miami-Dade County, Florida: Conducted Phase I and Phase II ESAs on four parcels slated for redevelopment as low-income housing. Identified former land use for one parcel as a previously-unknown landfill. Worked closely with tax credit consultants to address lender and tax credit syndication issues.

Phase I ESAs of five active granite quarries in Pennsylvania, New Hampshire, and Vermont, owned by Rock of Ages Corporation. Issues identified included portable fuel tanks and fuel and hazardous materials storage.

Various Commercial Real Estate Properties, Miami-Dade, Broward, and Palm Beach Counties: Completed various Phase I and Phase II ESAs for commercial properties for one buyer. Properties included a former Sears warehouse with petroleum and hazardous materials storage issues, office buildings, and vacant land.

Regulatory Compliance

Permitting/Monitoring

Ms. Peterson has assisted various clients with regulatory compliance issues, including hazardous materials management, waste water and NPDES permitting, and land use.

Former IBM Corporation Facility, Boca Raton, Florida: Project Manager in charge of working with IBM environmental engineers to implement a variety of monitoring and compliance programs, such as wellfield groundwater monitoring, sewer effluent monitoring program, NPDES discharge permitting, surface water monitoring, plating line closure, and uplands preservation.

Hazardous Materials Management Plan, Cruises Logistic, Medley, Florida: Developed a hazardous materials management plan in compliance with the requirements of Cruises Logistic largest client, Carnival Cruise Lines. The management plan specified requirements for hazardous materials management and handling, as well as spill response.

Hydrogeology

Geology/Water Supply

As a Professional Geologist, Ms. Peterson has provided geological services to clients on several projects. Aquifer Characterization and Monitoring, City of Sunrise, Florida: Provided City of Sunrise consultant MWH with geological services to describe aquifer materials, especially with respect to porosity and permeability for the expansion of one of the City's wellfields. Conducted site assessment for the effects of a potential discharge of petroleum from an emergency generator at another City of Sunrise wellfield.

Erik J. Siver, EIT

Engineer, Health, Safety, and Environmental Services

Education

BS, Environmental and Resource Engineering – 1991 SUNY-ESF, Syracuse, NY

Registrations/Certifications

Engineer-In-Training, New York, 1991

Mr. Erik Siver offers more than 22 years of experience within environmental consulting as a program manager, project manager, and engineer working for private and public clients focusing on designing and implementing services to meet specific client needs for single and multi-site portfolios.

Related experience includes project scheduling, budget tracking, project health and safety, supervision of construction activities, soil and groundwater investigations, and remedial design and implementation at petroleum and hazardous material sites. He has been responsible for the characterization and proper offsite disposal of more than 300,000 tons of materials impacted with hazardous constituents. Mr. Siver has implemented all phases of soil and groundwater investigations and remediation including development of work plans, overall project management, reporting, generation of design specifications, and implementation of remedial programs with hazardous wastes including metals, volatile organic compounds (VOC), semi-volatile organic compounds (SVOC), polychlorinated biphenyls (PCB), pesticides, and herbicides. He has also managed and participated in single and portfolio programs for Phase I Environmental Site Assessments (ESA) environmental health and safety audits. Mr. Siver has managed large facility lead-based paint and asbestos surveys and abatements.

Mr. Siver is experienced in managing multidisciplinary teams for environmental projects including acquisition support, petroleum and hazardous materials sites, compliance, auditing, safety, and construction.

Additional Registrations/Certifications:

- 40-Hour OSHA HAZWOPER & 8-Hour Refresher Training
- 8-Hour OSHA Supervisor Training
- 10-Hour OSHA Construction
- Subsurface Clearance Training
- Loss Prevention and Behavior- Based Safety Training
- NSC Defensive Driving
- CPR and First Aid
- Georgia Soil and Water Conservation Level 1A Certified Person
- NITON XRF Spectrum Analyzers Training Course
- Georgia Utility Facility Protection Act Training, Certificate of Completion
- ICS-100 Introduction to the Incident Command System

Erik J. Siver, EIT

Project Experience

Environmental Remediation

Various Industries and Government

Construction resident/site engineer for the remediation of a former coal tar processing facility in the northeast. Total project value $40 million. The remediation included the construction of a 1,200 foot long steel confined disposal facility (CDF), mechanically dredging 75,000 cubic yards of PAH-impacted sediments from the river, and stabilization. 50,000 cubic yards was installed in the CDF and 25,000 cubic yards was segregated for off-site disposal. Acted as the on-site client representative for CDF construction and dredging activities, as well as associated air, vibration, and surface water quality monitoring. Responsibilities included coordination of any field changes to the construction, review and approval of the contractor's monthly invoices, monitoring construction progress and techniques, coordinating weekly project meetings, and health and safety issues.

Project Manager at a 14-acre former phosphate fertilizer manufacturing plant with lead and arsenic impacts in Savannah, Georgia with a total cost for investigation and remediation in excess of $1.5M. Performed historical research to identify former site occupants and conducted soil and groundwater investigations. Developed remediation and site-specific health and safety plans. Remedial activities included removal of more than 20,000 tons of hazardous material, evaluating disposal options, directing on-site stabilization, sampling, site restoration, and reporting. These on-site stabilization activities resulted in a cost savings of more than $1M in disposal charges.

Project Manager for the remediation of the Ideal City chlorinated pesticide site under a state-funded Georgia HSRA contract. The primary chemical of concern was 4,4-DDT. Another contractor had previously conducted site investigation activities on the project site but the former sampling locations were not identifiable due to lack of survey controls still existing on the site. Reviewed files and attempted to recreate sampling points during site investigation activities. Developed a work plan that included site investigation and remediation plans. Performed a site investigation that included soil sampling with hand auger and direct push techniques at more than 75 locations and included more than 150 soil samples for pesticides. During site investigation activities, impacted soil was characterized for off-site disposal. Excavation of impacted soils was conducted and more than 550 tons were transported for off-site disposal based on the site investigation results. Provided weekly updates to the client project manager. Prepared a Removal Action Report the entire project including site investigation and remediation activities.

Project Manager for the remediation of a former battery cracking and recycling facility in Powder Springs, Georgia listed on the HSI. The contaminants consisted of lead and other heavy metals. Project involved collection of soil samples, XRF screening of soils, excavation and off-site disposal of 20,000 tons of impacted soil, post-excavation sampling, data management, building decontamination and demolition, air monitoring, wipe sampling, and reporting. On-site treatment techniques saved the client more than $500K on this $1.6M project. Project finished on time and within budget.

Project Manager for a rapid response cleanup of a release of chlorinated VOCs to the soil at a facility located in a mixed use development of residential and commercial properties in Dalton, Georgia for a financial institution. Supervised direct excavation activities of impacted soil to below notification concentrations. Arranged for the transportation and disposal of the excavated materials to a permitted landfill. Prepared a remediation report. The entire remediation was planned and executed in less than 30 days. Results of excavation activities were submitted as part of a groundwater VOC notification. Georgia

Erik J. Siver, EIT

EPD reviewed the notification package and concurred with the recommendation of not placing the site on the Hazardous Site Inventory.

Project Manager for remediation of a solvent recycling HSI site in Atlanta, Georgia. Responsible for operation and maintenance (O&M) of soil vapor extraction (SVE) and air sparge system, annual monitoring, and reporting to EPD. The remedial system consisted of zoned horizontal SVE wells and vertical SVE and air sparge wells, oxidizer, and scrubber system. Annual O&M budget $600,000.

Project Manager for a Georgia HSRA site within the city limits of Atlanta, which is a former transformer repair facility. An appliance distribution firm currently occupies the site. The facility is listed on the Hazardous Site Inventory due to releases of PCBs and SVOCs to the soil and groundwater. Reviewed historic site data and developed a removal plan for SVOC- and PCB-impacted soils from inside and outside of an occupied warehouse. Conducted indoor air sampling to document compliance with the site-specific health and safety monitoring requirements. Expanded an existing groundwater pump-and-treat system. Prepared a remedial action report. Project completed under budget.

Environmental Dive Team member for pre-dredging investigation of subaquatic vegetation and sediments. Data gathered during diving was utilized to create base line conditions for sediment dredge areas as well as control areas.

Project Manager for a remedial construction project at an auto parts manufacturing facility. Project included the removal of 6,000 tons of soil from surface-water retention ponds, cleaning of 4,000 sq. ft. of AST containment areas, cleaning of a drainage flume, site restoration, and reporting. Conducted in-place cleaning of more than 100 feet of storm sewer saving the client $10,000. Contaminants of concern included styrene, acetone, and xylenes and other VOCs.

Project Manager for soil and sanitary sewer evaluation at a transformer repair facility in Louisiana. Performed the repair of a collapsed sanitary sewer line in PCB-impacted soil. Remedial activities included the removal of 100 tons of hazardous material, sanitary sewer line repair, surface water pump installation, site restoration, and reporting.

Landfill Investigation

City Government and Private Industry

Project Manager for a former non-permitted industrial landfill site in the City of Atlanta, Georgia. The site was subsequently developed as a multifamily residential development. The site was listed on the Georgia Hazardous Site Inventory (HSI) for the release of metals and SVOCs to the soil. Conducted a file review and developed a work plan, project schedule, and cost estimate. Results of the site investigation activities identified areas of additional impacts directly abutting the adjacent street. Prepared tree removal permits for subsequent approval by the responsible arborist. Conducted removal of old growth trees. Utilized a design team and procured installation of 170 feet of steel sheet wall to a depth of 40 feet to allow excavation to groundwater without disturbance to the road. Remedial activities included excavation of approximately 3,000 tons of impacted soil, post-excavation soil sampling, and preparation of a remedial report. The report was submitted to EPD and the site was subsequently removed from the HSI.

Field Engineer for the investigations of two non-permitted industrial landfills for a major chemical company in Alabama. The landfills consisted of PCB- and VOC-contaminated production material and construction debris buried on site by the previous owner. Removed more than 5,000 cubic yards of waste

materials. Supervised excavation activities and segregation of excavated waste materials, which saved the site owner $100K.

Served as Task Manager for construction of a four-acre cap over an industrial landfill containing charcoal tar pits in Arkansas for a major wood products company. Field sited and constructed the site access road over a former railroad trestle including construction of a bridge that saved the client more than $25,000. Included remedial design, work plan submission to the State of Arkansas, planning, site supervision, and coordination of the construction of a geotextile and soil cover system. Project was award based on past superior performance for the client. Prior firms were unable to provide a feasible design and workable capping system.

Construction NPDES Compliance

Private and Public Clients

Obtained a land disturbance permit for a 40,000 ton soil removal activity adjacent to the Savannah River. Prepared an Erosion, Sediment and Pollution Control Plan (ESPCP) that underwent County and Federal Agency review and approval. Prepared and obtained a stream buffer variance to excavate impacted soil along the Savannah River.

Prepared ESPCP plans for multiple retail, manufacturing, and power generating facilities in Georgia. Plans complied with regulatory requirements.

Inspected active construction sites as a third party representative for public and retail construction projects. Inspections including documentation of compliance with existing ESPCP, recommendations for improvements to existing erosion control structures, NPDES water quality monitoring, and reporting to the construction manager and client.

Prepared construction manual for client contractor for retail construction sites. Sites maybe stand alone or part of a retail development of multiple stores. The construction manual details all aspects of environmental and permit compliance including responsibilities under the ESPCP.

Project Manager and Engineer for a creek restoration and erosion control project at a battery manufacturing site in Tennessee. Project included design of a solution and preparation of a work plan for TDEC approval. Creek banks were stabilized utilizing gabion baskets. Installation was completed with minimal disturbance to existing creek bed and vegetation.

Health and Safety

Private Clients

Safety Advisor for the Oil Spill Response in Gulf of Mexico. Reported directly to Safety Officer. Developed incident tracking database and prepared all necessary incident reporting for incident command, OSHA, and contractors. Part of the team that developed Heat Stress Management program for response workers to work safely. Reviewed contactor safety plans. Authored and distributed more than 100 safety messages for topics relating to incidents and programs for the response. Reviewed contractor safety plans. Worked within the Incident Command System structure. Safety liaison with NRDA and SCAT teams.

Erik J. Siver, EIT

Senior Environmental Auditor for Environmental Health and Safety Audits within the US for a global construction firm. Responsible for auditing site activities and management systems for compliance with applicable environmental regulations. Also responsible for assisting a safety professional with the safety program audit.

Program Management

State Government & Private Industry

Acted as Program Manager for State of Georgia Contract for Hazardous Sites Cleanup. The program included the site investigation and remediation of 12 sites totaling more than $5,000,000 over three years. Projects included site investigation and remediation. For each site a review of existing files was conducted. A Corrective Action Plan was developed that included additional soil, groundwater, or other media sampling as well as an evaluation of remedial alternatives with cost estimates. Site investigation included the use of hand sampling, hand auger, direct push, test pits, and drill rigs. Active remediation was conducted on a unit rate pricing. A Remedial Action Report was competed documenting site remediation. Contaminates of concern included chlorinated VOCs, semi-VOCs, pesticides, and metals.

Program Manager for the State of Georgia Contact for Underground Storage Tank Investigation and Remediation for three separate three-year contracts. Responsible for monitoring project schedules, budgets, and deliverables on multiple sites. Accountable for project safety, profitability, and on-time delivery. Projects included site investigation and remediation at petroleum UST sites as well as, review of other and oversight of other UST consultant's site investigation and remedial action plans.

Program Manager for Atlanta Housing Authority (AHA) Environmental support contract. Participated in proposal effort securing a 5-year contract to assist AHA in property acquisitions, as well as management of existing environmental liabilities. AHA projects included building condition assessments, design feasibility studies, Phase I Environmental Site Assessments (ESAs), asbestos surveys and removals, and Phase II ESAs.

National Account Manager for international snack foods manufacturer. Responsible for fiscal planning, budget tracking, project updates, and consulting. Projects included SPCC plans, Phase I and Phase II Environmental Site Assessments (ESAs), UST removal and remediation, UST and AST line annual tank tightness testing, UST and AST system design and installation. Performed asbestos and lead-based paint surveys and removals at the only manufacturing plant closures in company history.

Program Manager for multiple portfolios of Phase I ESAs. ESAs conducted in accordance with ASTM and AAI standards. Responsible for cost proposals, schedule, client interface, and review of reports. Sites include retail petroleum, manufacturing, office, residential and commercial facilities across the nation.

Groundwater Investigations

State Government and Various Industries

Project Manager and Field Engineer at a 17-acre transformer manufacturing and repair facility. Total project cost for investigation and remediation in excess of $2.5 million. Performed site soil and groundwater investigation for PCBs. Developed construction and remediation plans and conducted remedial oversight and post-excavation closure sampling. Remedial activities included the removal of more than 6,000 tons of hazardous material, site restoration, and the preparation of a CSR. The groundwater assessment included installing more than 30 wells in the shallow saprolite and bedrock

aquifer to assess the groundwater impacts. Results of the soil remediation allowed removal of the site soil listing on the HSI.

Project Manager and Field Engineer numerous petroleum UST sites including soil and groundwater investigations and remediation as well as system removal in more than 30 different states, as well as a direct contract with the State of Georgia. The contract with the State of Georgia included the reviews of CAPs submitted by other consultants, soil and groundwater investigation, and remediation of state funded facilities, and identifying responsible parties.

Ash Assessment

Power Industry

Served as Field Supervisor for a release of coal fly ash from a surface impoundment at a power generation facility in the Northeast. Supervised assessment of ash distribution in a river. Field activities included the reassessment of post-storm river conditions, supervision of commercial divers and near-shore teams, collecting core samples, and generating maps. Monitored quality assurance of commercial diver dredging activities and developed quality assurance plan for the dredging activities.

David A. Pass, P.G., MBA

Senior Project Manager

Education

B.A. Geology/Chemistry, 1978
University of Texas at Austin, TX
M.B.A., 2004
Kennesaw State University, GA

Registrations/Certifications

Registered Professional Geologist GA #1498
Registered Professional Geologist FL #1960
GSWCC Level II Certified Design Professional #0000061981
AAPG Certified Petroleum Geologist #5981
OSHA 8-Hour Hazardous Waste Operations and Emergency Response (HazWOPER) Supervisor Training (29 CFR 1910.120)
OSHA 40-Hour and 8-Hour Refreshers HazWOPER Training (29 CFR 1910.120)
Loss Prevention System (LPS) H&S certification with Chevron & ExxonMobil

Professional Affiliations

American Association of Petroleum Geologist
National Ground Water Association
Beta Gamma Sigma National Honor Society
Phi Kappa Phi National Honor Society

David A. Pass is a Registered Professional Geologist and environmental consultant with more than 24 years diverse experience in the environmental and petroleum industries. Mr. Pass has a thorough understanding of the current conditions at the Covington site and was assigned to this project aligned with his extensive understanding of North Georgia geologic conditions and the behavior of dense non-aqueous phase liquids (DNAPLs) in this environment once the magnitude of this release was recognized.

His experience includes complex subsurface environmental investigations and remediation, regulatory negotiations, litigation support, representation before stakeholder groups, risk management, merger and acquisition due diligence, and vapor intrusion. Mr. Pass has led teams of engineers, geologists and multi-disciplined scientists to accomplish these tasks for numerous Fortune 500 firms including major oil and chemical companies, private entities, State and County entities, and Potentially Responsible Party (PRP) groups. Technologies evaluated/designed and deployed include; ISCO, PRBs, Containment, Stabilization, AS/SVE.

Mr. Pass has worked directly with Georgia EPD on the investigation, remediation and closure of more than 30 sites over the last 24 years.
Mr Pass' experience includes complex subsurface environmental investigations and remediation, regulatory negotiations, litigation support, representation before stakeholder groups, risk management, merger and acquisition due diligence, Brownfield Site redevelopment and ground water resource assessment and exploration.

Mr. Pass has led teams of engineers, geologists and multi-disciplined scientists to accomplish these tasks for numerous Fortune 500 firms including major oil and chemical companies, private entities, State and County entities, and Potentially Responsible Party (PRP) groups. He has provided these services for well over 200 facilities including oil and gas bulk distribution terminals, chemical manufacturing plants, solvent reclamation facilities, metal fabricators, major airports, public landfills, real estate developments, petroleum retail facilities and other hazardous waste sites.

Mr. Pass holds the first United States Patent issued for the design of soil vacuum extraction system hardware (Patent No. 5,287,927). Mr. Pass was the first vendor to implement soil vacuum extraction as a remediation technology for Chevron USA in the southeastern U.S. and became a Chevron USA preferred vendor for remediation systems while president /owner of United Science and Technologies, Inc. (USTI).

David A. Pass, P.G., MBA

Project Experience

Chlorinated Solvent Remediation / Remediation Systems Design, Installation and Operation

LaRoche Industries – Freon Manufacturer

Project Director and company owner responsible for remediation systems permitting, pilot testing, systems design, fabrication, installation and operation under a State regulated cleanup of a chemical plant (LaRoche Industries) that had experienced a release of approximately 28,000 gallons of DNAPL The remedial systems involved 23 vertical air sparge wells, 1,500 feet of horizontal air sparge wells, 1,800 feet of horizontal vacuum extraction wells, a 2,000 SCFM, 75HP vacuum blower, ground water air stripper treatment systems and dual bed on-site carbon adsorption systems with steam regeneration. All systems were equipped with SCADA sensors and controlled by interactive computer telemetry (Wonderware) and emissions were quantified with continuous on-site gas chromatography. The air-sparge systems were equipped with actuated valves for two different flow streams that operated under interactively regulated low and high pressures and flows. Perimeter clean monitoring wells were equipped with sensors that detected volatilized VOCs and at trigger set points would signal the air sparge wells to actuate valves in order to decrease injection pressures and flows. Once the perimeter wells detected VOCs dropped below set points they would interactively modulate injection pressures and flows to balance the air sparge systems to prevent out of bounds migration of volatilized VOCs. Simultaneously, the vacuum extraction recovery flows and vacuum pressure were modulated through interactive telemetry to increase VOC recovery. Groundwater removed from the vacuum air stream were collected in a knockout tank and automatically pumped at high level to a holding tank that was then processed at tank high level to an air stripper. The VOC air stripped water was then automatically sent to a discharge holding tank. Once the holding tank reached a set point level, sensors signaled an auto dialer to call an equipment technician to come sample the stripped discharge water before it was diverted to an NPDES permitted out flow. Pore air recovered from the vacuum extraction system and emissions from the dual carbon bed adsorption system were analyzed by onsite GC and the results were quantified by the SCADA and downloaded to an MS Excel spreadsheet that could be viewed interactively. The recovered VOC were captured in liquid form by chilling the carbon adsorption beds and automatically drummed in 55 gallon drums. The systems were responsible for the removal of more than 50,000 pounds of chlorinated solvents.

Chlorinated Solvent Remediation / Remediation Systems Design, Installation and Operation

Murata Electronics North America

Project Director for site investigation and remediation of a chlorinated solvent impacted site that is situated over a limestone sinkhole (karst). Planned and conducted geophysical studies of the site to locate fractured and karst bedrock including ground penetrating radar, microgravity and seismic refraction. Performed aquifer rising/falling head tests to determine hydraulic conductivity. Installed 25 assessment monitoring wells to depths up to 160 ft bgs, collected and analyzed soil and ground water samples, conducted Biochlor fate and transport models, prepared, signed, sealed CERCLA Site assessment report. Conducted pilot tests for soil vacuum extraction and in situ chemical oxidation (potassium permanganate and sodium persulfate). Prepared, permitted and implemented Corrective Action Plan including the design, installation and operation plan of four 120 ft horizontal vacuum extraction recovery wells, a 30 HP vacuum extraction system equipped with two 1,000 lb carbon adsorption vessels, and collection, treatment and POTW discharge of recovered ground water. The vacuum extraction system was installed beneath an active manufacturing building. Permitted and implemented chemical oxidation of chlorinated solvent impacted ground water through 8 cycles utilizing

14,000 gallons per cycle of potassium permanganate, followed by sodium persulfate activated with iron chelate. Effectively reduced chlorinated solvent concentrations by 95%.

Benzene/Chlorinated Solvent Remediation / Effective Change in Remediation Strategy

DSM ChemicalsNA

Reviewed and evaluated 10-year environmental assessment and 3rd party remediation history of DSM Chemical NA facility in Augusta as part of a financial due diligence under the direction of a local attorney. I made proactive recommendations for advancing assessment and remediation efforts that were accepted by the client. I subsequently negotiated with regulators to accept my approach and implemented two different types of ISCO pilot tests that proved successful for reducing benzene and chlorinated solvents by 90% during the six-month pilot tests. Environmental regulators, acting under my evaluation and recommendations, allowed active remediation systems including pump & treat, air sparge, soil vacuum extraction and thermal oxidation systems developed by others to be discontinued. Implementation of my remedial strategy has saved the client millions in future operation and maintenance fees associated with the active systems.

Multiple Industrial Sites PRP Group / Risk Management Obviates Active Remediation

Seaboard Site Group, Atlanta, Georgia

Project Director responsible for the Site investigation and preparation of a Georgia Compliance Status Report and Corrective Action Plan for a Potentially Responsible Party Group (Seaboard Site Group) charged with the investigation and corrective action of commingled petroleum and chlorinated solvent releases from several industrial and chemical facilities. Installed 80 ground water monitoring wells at depths up to 300 feet below ground surface. Evaluated 30, EPA Method 8260B/8270C compounds that were present as phase-separated product. Evaluated and modeled ground water hydrogeology from aquifer conductivity tests and knowledge of subsurface hydrogeology. Saved the clients millions of dollars through an innovative corrective action-monitoring program that gained regulatory approval utilizing sentinel wells installed along a creek bank and in-stream monitoring in lieu of active remediation. The monitoring program allowed for the verification of modeled risk-based ground water regulated chemical threshholds significantly higher than CERCLA requirements, thus obviating the need for active remediation.

Petroleum Underground Storage Tank Remediation / Remediation Systems D&O

Chevron USA

Responsible for the assessment and remediation systems design, installation and operation for more than 50 Chevron USA (and former Gulf) petroleum retail facilities while president owner of USTI. These sites were contracted under the direction of Charles Brigham, former Chevron USA Southeastern Division Manager. Mr. Pass was responsible for implementing corrective actions and the permitting, design, installation and operation and maintenance of remediation systems including plume capture pump & treat systems, product skimmers, oil/water separators, soil vacuum extraction, air sparging, shallow tray air strippers, dual-phase extraction and thermal oxidation incinerators. Mr. Pass also evaluated remediation systems installed b others and recommend changing in the D&O plans and/or replacement with more effective remediation systems.

David A. Pass, P.G., MBA

Petroleum Underground Storage Tank Remediation / Remediation Systems D&O
Amoco Production Company

Responsible for the assessment and remediation systems design, installation and operation for more than 40 Amoco Production Company petroleum retail and bulk distribution facilities while president owner of USTI. These sites were contracted under the direction of Gary Umbehagen, former Amoco Southeastern Project Manager. Mr. Pass was responsible for implementing corrective actions and the permitting, design, installation and operation and maintenance of remediation systems including plume capture pump & treat systems, product skimmers, oil/water separators, soil vacuum extraction, air sparging, shallow tray air strippers, dual-phase extraction and thermal oxidation incinerators. Mr. Pass also evaluated remediation systems installed b others and recommend changing in the D&O plans and/or replacement with more effective remediation systems.

Creosoting Operation Remediation / Bio-Remediation Systems D&O
Union Timber Company, Homerville, Georgia

Project Director for remedial investigation and feasibility studies (RI/FS) of the former Union Timber creosote facility in Homerville, Georgia that was impacted with PAHs including, pentachlorophenol, creosols and DNAPL. This was the first RCRA facility in EPA Region 4 subject to RCRA 7003 imminent and substantial endangerment authority. Created, permitted and implemented a Corrective Action Management Unit (CAMU) that allowed for the creation of a common ex-situ soil pile from several regulated units. Designed, installed and operated bioremediation nutrient and engineered bacteria injection wells. In conjunction with Dr. Ralph Portier and Advanced Biological Systems, Inc. (ABS), implemented in situ and ex situ bio-remediation using site-specific enhanced bacteria augmented with nutrients. Monitored effectiveness of biodegraders with DNA polymerase chain reaction identification and phospholipids fatty acid analysis. Bioremediation was successful in bringing downgradient ground water plume migration under control through the bioreactive barrier treatment installed along the property border.

Solid Waste Landfill Remediation / Assessment of Corrective Measures
Cherokee County Government, Georgia

Project Director for the closed 160-acre Cherokee County solid waste landfill. Completed an Assessment of Corrective Measures Study (ACM) involving more than 100 sampling points including Appendix I, II and IX constituents. Several remedial alternatives were presented with financial present worth calculations. Designed and permitted a biosparge, low-pressure, low-volume air injection system, augmented with chemically metered nutirients to enhance naturally occurring bacteria degraders to induce chlorinated solvent remediation. Deigned separate pilot test for methane to electricity recovery utilizing a microturbine generator. Responsible for all aspects of permitting and implementation of the ACM.

Publications and Presentations

Pass, D.P., DNA Analysis Answers Basic Bioremediation Questions, Ground Water & Pollution Control Association Conference, November 2002, Atlanta, Georgia.

Pass, D.P. and C. Mamane, Interactive Telemetry Controls Remediation Operations at a Hazardous Waste Site, Pollution Engineering International, Cahner's Publishing, Summer 1999.

Kreitler, C.W., Pass, et al, Geology and Hydrogeology of the East Texas Basin, The Texas Bureau of Economic Geology, 1978.

Betty S. Harris, MPH, CIH, CHMM, CMC

Senior Consultant, Safety and Industrial Hygiene

Education

MPH, Industrial Hygiene, 1980
University of South Carolina, Columbia, SC

B.S., Biology, 1975
University of South Carolina, Columbia, SC

Registrations/Certifications

ABIH Certified Industrial Hygienist, Certificate #3312

Certified Hazardous Materials Manager Certificate #1366

Certified Microbial Consultant, ACAC Certificate #1105005

40 Hour OSHA Hazwoper Training/Instructor

8-Hour OSHA Hazwoper Supervisor Training/Instructor

Various regulatory specific courses and experience can be furnished on request

Mrs. Betty S. Harris has more than 33 years of multidisciplinary experience in occupational health and safety. Her experience includes both general industry and government projects at a variety of types and project work sites including DOE, industrial facilities, and private sector sites such as schools, hospitals and universities.

Ms. Harris served as the Associate Director of the Alabama OSHA 7(c) (1) Consultation program for providing comprehensive industrial hygiene, OSHA compliance assistance and ergonomic evaluations in a wide variety of diverse small and medium-sized employers in Alabama.

Additionally, she was involved with the hazardous waste program for industries in Alabama, asbestos in schools K-12, and lead based paint in housing, as well as providing assistance to employers to achieve OSHA VPP status.

Ms. Harris has developed and taught courses in fundamentals of industrial hygiene, 40-Hour Asbestos Abatement Supervisor and Asbestos Worker Training courses, 40-Hour Hazardous Waste Operations and Emergency Response courses, and served as an Adjunct Assistant Professor in the College of Public Health and Environmental Sciences at the University of South Carolina, Columbia, South Carolina.

She serves as an expert witness on subjects related to mold and indoor environmental quality, industrial hygiene and employee exposure issues.

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Betty S. Harris, MPH, CIH, CHMM, CMC

Project Experience

Water Intrusion and Mold Prevention

Residential, Commercial, and Institutional

Ms. Harris has prepared and assisted in the implementation of water intrusion and fungal growth prevention. She has written prevention plans for numerous commercial, institutional and residential clients including small and large property management firms, commercial property management firms, and institutions including universities, public and private schools and industrial facilities. She has worked with management representatives to tailor the principles of mold prevention and remediation to the specific facility.

Litigation Support

Various Law Firms

Ms. Harris has provided expert witness consultation and testimony on microbial growth and remediation and related water incursion issues as they relate to the impact on indoor environmental quality and remediation of building materials supporting mold growth.

Indoor Environmental Quality (IEQ) Assessments and Investigations

Federal Government & Public and Private Properties

Ms. Harris has performed numerous water intrusion evaluations, cause and origin evaluations, and detailed IEQ assessments and investigations for temporary housing units. She collected extensive bulk and swab samples to confirm the presence of mold, interpreted the survey results and made recommendations for salvability of water damaged housing unit contents.

Clandestine Methamphetamine Laboratory Evaluation and Remediation Oversight

Federal Government & Public Housing

Ms. Harris evaluated multiple temporary housing units where authorities and hazardous had seized chemicals from previous methamphetamine labs. Ms. Harris evaluated risk factors and prepared a report with recommendations for appropriate assessment and cleanup recommendations for these housing units. She has provided remediation work plans for the cleanup of clandestine methamphetamine labs in private housing, and performed sampling to confirm that the dwellings were free of chemical contamination before re-occupancy.

Silica Exposure During Hydraulic Fracturing Operations

Hydraulic Fracturing Industry

Ms. Harris has conducted broad-based sampling and evaluation of crystalline free silica during hydraulic fracturing operations in the Southwest. Project activities included air sampling to evaluate employee exposures to crystalline free silica and evaluation of engineering controls.

Betty S. Harris, MPH, CIH, CHMM, CMC

Industrial Hygiene Audits

Petrochemical Industry

Ms. Harris has conducted industrial hygiene audits for five large petrochemical complexes throughout the country of Mexico. She aligned these audits with clients' requirements for consistency among various locations, helped clients achieve compliance with federal requirements and assisted with compliance plan development.

Industrial Hygiene Audits

Aerospace Industry

Ms. Harris conducted an exhaustive industrial hygiene audit and chemical exposure assessment as well as audits of OSHA required programs including Respiratory Protection, Hearing Conservation, Hazard Communication, and Personal Protective Equipment to assist the employer with achieving VPP status with OSHA.

Industrial Hygiene Support

Metals Industry – Ferrous and Nonferrous

Ms. Harris has provided industrial hygiene and safety support to various brass, bronze, and gray iron foundries where she characterized worker exposures to lead and other metal fumes, as well as to dust, silica, methylene diisocyanate, formaldehyde, phenol, and noise. Ms. Harris developed programs for respiratory protection, medical monitoring, and worker training, which allowed clients to comply with health and safety regulations and improve worker safety.

Industrial Hygiene Surveys

US DOE Sites

Ms. Harris has conducted site-wide confined space identification and characterization at a radioactive waste treatment facility. She also developed health and safety plans for hazardous waste cleanups at DOE sites for multiple projects. Ms. Harris provided hazardous waste operations health and safety training for all site workers at a RCRA Superfund Cleanup Site for the removal or disposal of chemical warfare agents and tear gas.

Building Chemical Contamination Remediation Oversight

Public Schools and Universities

Ms. Harris has conducted chemical contamination surveys of buildings contaminated with mercury and cyanide and developed remediation plans to properly decontaminate the buildings while protecting the health and safety of cleanup workers and building occupants. She has provided remediation oversight for the duration of the cleanup operations, and provided post remediation sampling to confirm that the buildings were safe for re-occupancy after the cleanup.

Betty S. Harris, MPH, CIH, CHMM, CMC

Industrial Hygiene Surveys

Multiple Diverse Industries

Ms. Harris has conducted chemical exposure evaluations, OSHA required program development, implementation and training, and assisted with the development and evaluation of engineering controls for diverse industries. This has allowed the clients to achieve compliance with OSHA regulations, protect their workers, reduce lost workdays resulting from illnesses and injuries, and improve productivity.

Industrial Hygiene Oversight

Deepwater Horizon Response Industrial Hygiene Monitoring

Ms. Harris was involved with the Gulf of Mexico Deepwater Horizon oil spill cleanup response and served as the Certified Industrial Hygienist for the Florida panhandle, Biloxi, Mississippi, Gulfport, Mississippi, and Venice, Louisiana. She supervised a team of 15 technicians characterizing exposures to workers during the clean-up operations and scouted for incoming oil on waters with the marine operations of local volunteer boat owners.

Disaster Response: Industrial Hygiene Oversight

Post Hurricane Response and Georgia, Tennessee Floods

Ms. Harris has been involved with multiple hurricane response teams since hurricane Hugo in 1989. She assisted insurance companies, hospitals and homeowners in evaluating salvable materials after the disaster and provided oversight during microbial remediation for hotels, hospitals and homes as well as post remediation oversight. After the Georgia (2009) and Tennessee floods (2010), Ms. Harris provided post disaster assistance with evaluating microbial contamination of buildings including malls, hospitals, and schools. She developed remediation protocols for contractors and provided oversight during the remediation activities to enable re-occupancy as soon as possible after the disaster.

Professional Affiliations

American Board of Industrial Hygiene, Diplomate

American Conference of Governmental Industrial Hygienists (ACGIH)

American Industrial Hygiene Association (AIHA)

American Industrial Hygiene Association (AIHA) – Carolinas Section

Indoor Air Quality Association

Institute of Hazardous Materials Managers

Scott Johnston

Senior Project Manager, Site Manager

Education

B.S., Geology, 1989
Radford University, Radford, VA

Registrations/Certifications

Transportation Worker Identification Credential (TWIC) holder

US Department of Defense RapidGate Credential Holder

AHERA Building Inspector, State of Florida (Inactive)

Helicopter Underwater Egress Training

DOT Training for Offerors of Bulk and Non-bulk Hazmat Packages

OSHA 40-hour Hazardous Waste Site Investigation Training, 29CFR 1910.120

OSHA 8-Hour Health & Safety Refresher Training for Hazardous Waste Site Activities per 29 CFR 1910.120

OSHA 8-Hour EPA Regulations for Management of Hazardous Waste per 40 CFR 265.16

Mr. Scott Johnston has over 23 years of experience in the environmental assessment and remediation industry. Mr. Johnston has an extensive knowledge of regulatory compliance and permitting and has conducted hundreds of environmental site assessments and remediation projects in accordance with the Federal, State and local regulations.

Mr. Johnston's has conducted hundreds of Site Assessment Investigations and been responsible for the design, installation, implementation and operation and maintenance for dozens of remediation projects ranging in scope from multi-media source removals to logic-controlled in-situ remediation systems. Many of the site assessment activities and subsequent Remedial System installation activities were completed under the Florida Department of Environmental Protection (FDEP) Petroleum Preapproval Program.

He is knowledgeable in the area of waste characterization and management of hazardous and non-hazardous wastes and has performed hazardous materials and hazardous waste management for a global aerospace and defense contractor currently under contract with the United States Navy.

Mr. Johnston has technical expertise in all areas of field services, project implementation, report preparation and business management. Mr. Johnston's technical skills, expertise and experience range from small tasks to large, multi-faceted, time-sensitive projects. Public and private sector clients have benefited from Mr. Johnston's attention to detail and comprehensive approach in pragmatic client /agency negotiations.

Additional Registrations and Certifications:

- OSHA 10-Hour Maritime Industry
- Behavior Based Safety Training
- Loss Prevention System (LPS)

Scott Johnston

Project Experience

Site Assessment and Remediation

Retail Petroleum Industry

Mr. Johnston has managed or participated in hundreds of site assessment and remediation projects throughout Florida and several other states. Mr. Johnston's assessment and remediation experience ranges from petroleum and chlorinated solvent impacts associated with retail gas stations conducted under the Florida Department of Environmental Protection (FDEP) Petroleum Preapproval Program to large, multi-faceted investigations associated with a former municipal landfill, golf courses and parks; a few notable projects of which are provided below.

Former Virginia Key Landfill – Mr. Johnston was the Assessment Team Leader for assessment activities conducted at the former 120-acre Virginia Key Landfill which included due diligence, the preparation and implementation of a site-specific health and safety plan, the preparation of a Contamination Assessment Plan, wetlands delineation, land clearing, a site topographic and planimetric survey, a geophysical survey including both EM-31 and MASW methodology and subsequent implementation of assessment activities utilizing cluster wells to evaluate contaminants of concern associated with the former landfill.

Former Orange Bowl Stadium / Marlins Ballpark – Mr. Johnston assisted in the assessment and statistical evaluation of arsenic in soil concentrations identified at the Former 50-acre Orange Bowl Stadium facility which is currently under redevelopment as the Marlin's Ballpark. It was demonstrated that the 95% Upper Confidence Limit (UCL) of the soil remaining on-site was below the commercial/industrial direct exposure soil cleanup target level (SCTL) for arsenic, thus allowing conditional closure (NFAC), which provided the owner with the most flexibility with respect to site redevelopment and use. Mr. Johnston continues to assist the Marlins, the City of Miami and their contractors with issues related to arsenic in soil and groundwater including dewatering permitting/monitoring, soil management and implementation of engineering controls.

Former Bicentennial Park / Museum Park - Mr. Johnston assisted in the assessment and statistical evaluation of arsenic in soil concentrations identified at the approximate 30-acre Bicentennial Park located in downtown Miami. The assessment activities and statistical evaluation indicated that arsenic in soil concentrations may have been resultant from dredge spoils and other inconsistent materials utilized to fill the site and were used to support a Risk Based Corrective Action proposal to pursue conditional closure (NFAC) at the site with the use of institutional and engineering controls to address soil arsenic concentrations exceeding the Residential Direct Exposure SCTLs.

Hazardous Materials and Waste Characterization, Transportation, Recycling and Disposal

Mr. Johnston has managed the characterization, profile completion, transportation, recycling and/or disposal of both hazardous and non-hazardous media at hundreds of sites throughout the southeast United States over the last 20 years; a few notable recently completed projects of which are provided below:

Lockheed Martin Corporation / United States Navy – Responsible for the hazardous materials and hazardous waste management/documentation associated with the upgrade of SQQ-89 (V15) Sonar System onboard the USS Roosevelt (DDG 80) and most recently the USS Farragut (DDG-99). Activities included close coordination with in-house and subcontracted personnel regarding hazardous and non-

hazardous material use and location as well as the daily quantification and segregation of generated waste streams in accordance with Federal, State and Local Standard Item 99-60SE regulations. Responsible for the preparation of Volatile Organic Compound/Hazardous Air Pollutant (VOC-HAPs) and Emergency Planning and Community Right to Know (EPCRA) Section 313 reporting requirements.

Miami-Dade County / Miami International Airport – Responsible for sample collection, laboratory analytical evaluation, regulatory liaison services and reporting associated with the transportation and disposal of both liquid and solid wastes for dozens of projects conducted on behalf of the Miami-Dade Aviation Department and Miami-Dade County Permitting, Environment and Regulatory Affairs (PERA), formerly known as the Department of Environmental Resources Management (DERM) under the E04-DERM-01 Professional Services Agreement (PSA) for Environmental Cleanup, Compliance and Related Services, between Miami-Dade County and Bureau Veritas..

City of Miami / Florida Marlins – Responsible for sample collection, laboratory analytical evaluation, profile completion, regulatory liaison services and operations reporting associated with the transportation, and disposal of thousands of cubic yards of arsenic impacted media from both Miami-Dade County and City-owned parcels to approved disposal facilities for several projects conducted under Professional Services Agreements (PSA) for the City of Miami and Florida Marlins.

RCRA Closure / Title V Permitting / Storage Tank Compliance

Project Manager for services including RCRA Closure, Title V Air Permitting and related assessment services at the Sonic Aviation facility, Miami International Airport (MIA). Activities included characterization, profile completion and waste tracking of both hazardous and non-hazardous waste.

Compliance Auditing

Oil & Gas Industry

Mr. Johnston is currently providing a lead program management and auditing role on behalf of BP Remediation Management (RM) to evaluate and verify contractor conformance with BP RM's Health, Safety, Security and Environment Management (HSSE) System Defined Practices.

Health and Safety Training / Education

Retail Petroleum Industry

Mr. Johnston was responsible for the coordination and implementation of Loss Prevention System (LPS) integration for both in-house personnel and subcontractors. Responsible for coordination, construction oversight and LPS compliance of several remediation system installations in accordance with ExxonMobil's Operation and Integrity Management System. Mr. Johnston has conducted several Loss Prevention Observations and conducted Near Loss Investigations.

Emergency Response

Retail Petroleum Industry

Mr. Johnston has managed several emergency response operations conducted at various spill sites in Miami-Dade, Broward and Palm Beach counties.

I-95/ Woolbright Avenue, West Palm Beach, Florida: Conducted expedited permitting, lane closure, excavation and thermal incineration of hydrocarbon impacted soil and groundwater following an 8,000 gallon fuel spill accident.

Scott Johnston

ExxonMobil 02-RRM, Weston, FL: Responsible for the expedited assessment and installation of a soil vapor extraction system following the detection of gasoline vapors in an adjacent restaurant. Interfaced with the local Fire Department, Florida Power and Light, ExxonMobil and Great Dane Construction company in an effort to facilitate the reopening of the fueling facility and the restaurant.

ExxonMobil 02-HW7, Miramar, FL: Responsible for the expedited assessment and recovery of free-floating product on the water table following the detection failed line leak detector on one the underground storage tanks. Aggressive assessment and recovery efforts resulted in minimizing the spread of hydrocarbon impacts.

Vapor Intrusion and Mitigation

Finacial Industry

Mr. Johnston was responsible for the design and expedited installation of a vapor barrier and associated passive venting system in an effort to minimize the potential for an indoor air intrusion of volatile organic compounds from a chlorinated solvent release from an onsite dry cleaning facility in close proximity. A Geo-Seal™ vapor barrier system and Geo-Vent™ were installed within the sub grade aggregate in accordance with manufacture specifications to provide passive venting of the vapor barrier system. The Geo-Vent was terminated at two above grade vents installed within the building pad at pre-determined locations within the exterior walls of the facility. Mr. Johnston in currently assisting the Client with the evaluation and installation of vapor barrier systems during the construction of new facility locations in south Florida.

Spill Prevention Control and Countermeasure Plans

Electrical Distribution Industry

Mr. Johnston was responsible for the preparation of Spill Prevention, Control and Countermeasure Plans at over 330 facilities in the northeast and mid-Atlantic United States in conformance with the requirements specified in 40 CFR, Part 112. Potential spill scenarios at the facilities were evaluated using the Mineral Oil Spill Evaluation System (MOSES) software developed by the Electric Power Research Institute. Recommendations were made based on the statistical probability of potential spills reaching navigable waters of the United States or other sensitive receptors in close proximity. The data was then used to rank the facilities from a risk-management standpoint to facilitate the installation/implementation of secondary containment and/or diversionary structures with the goal of maximizing the cost/benefit to the Client.

Phase I / II Environmental Site Assessments

File Review/Compliance

Mr. Johnston has managed and prepared hundreds of Phase I / II Environmental Site Assessment Reports for Miami-Dade County under E04-DERM-01 PSA, major financial loan institutions and national clients. Responsibilities included federal, state and local environmental regulatory record review, site reconnaissance, interviews and related Phase II assessment activities.

Timothy P. Tedesco, PE, REM

Senior Consultant, Environmental Services

Education

B.S., Biophysics, 1989
University of Illinois - Champaign, Illinois

Registrations/Certifications

Licensed Professional Engineer, Illinois, License # 062-053326

40 Hour Hazardous Waste Operations and Emergency Response Training (1992) With 8 Hour Update (2011)

NPDES Construction Inspector, Florida, License # 25490

Professional Affiliations

National Registered Environmental Manager

Mr. Tim Tedesco is a Professional Engineering License and has over 20 year experience in providing environmental engineering and related professional services to federal, municipal and private clients. Mr. Tedesco has Certification from the National Registry of Environmental Professionals and HazWOPER. Mr. Tedesco's experience includes environmental Project Management, Phase I and II Environmental Assessments, Contamination Assessment Plans, Contamination Assessment Reports, Storage Tank Assessments, Remedial Action Plans, Remedial Action Construction, Remedial System O&M, Remedial System Optimization Studies, Resource Conservation and Recovery Act (RCRA) compliance, Emergency Planning and Community Right-To-Know Act (EPCRA) compliance, Response Clean Air Act compliance and Clean Water Act compliance.

These services include sites with Petroleum, Aviation Fuels, Radioactive, and Hazardous Material releases. Responsible for coordinating, presenting and negotiating with USEPA and various state regulatory agencies. He is familiar with federal and several state statutes dealing with contamination cleanup, Hazardous Materials, National Pollutant Discharge Elimination System (NPDES), spill planning/response and petroleum management.

He has completed numerous regulatory environmental compliance, safety and environmental management system projects for industrial and governmental clients. These projects include compliance auditing, safety program development, ISO 14001 implementation, process safety reviews, risk management and spill prevention planning.

Mr. Tedesco has served as an engineer/project manager for USAF (working with USCOE and AFCEE contracting agencies), several large industrial facilities, municipalities (St. Louis, Missouri and Largo, Florida), a large oil company and at numerous leaking UST sites in Illinois, Missouri and Florida.

He has working knowledge of regulatory guidelines and requirements affecting environmental management and remediation: the FDEP Petroleum Storage Tank Program, Voluntary Cleanup Program; Illinois Leaking UST (LUST) Program; Missouri Department of Natural Resources (MDNR) RCRA and Voluntary Cleanup Program; USEPA's Resource Conservation and Recovery Act (RCRA), Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), NPDES, EPCRA, the American Society for Testing and Materials (ASTM) guidelines and practices, and ISO 14001.

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Project Experience

Remedial Multi-Site Management

Industrial Facilities and USAF

General Groundwater – Performed and/or supervised groundwater well construction and sampling. Ground water well construction types include steel, PVC, telescope casings, piezometers and temporary geoprobes. Sampling methods include bailer, peristaltic pump, bladder pump and motorized pump. Aquifer geologic conditions consisted of silty clays, sand and bedrock. Installed and sampled hundreds of ground water wells meeting both state and federal EPA requirements.

General Soil – Performed and/or supervised soil sampling of various geology from the surface to depths of greater than 100 feet. Sampling methods include hand auger, geoprobe, spilt spoon and coring. Obtained hundreds of soil samples from both petroleum and hazardous contaminated sites; meeting both state and federal EPA sampling requirements.

Chemical Manufacturer - Project manager of a multi-month field sampling effort at an decommissioned manufacturer of decorative laminates for the transportation industry. The field effort consisted of several sampling procedures that generated over 50 soil samples, 50 ground water samples, 20 sediment samples, 20 surface water samples, and 50 exploratory borings for fill material.

Project required daily efforts of health and safety meetings, field instrument calibration, subcontract work oversight, client coordination, property/easement access coordination, clearing of utilities for digging operations, sample collection and document/shipment, coordinate with regulators and maintaining field log reports from each of the daily activities. Project culminated into a Technical Report that was utilized to justify use of an escrow account set up for a business transaction. Also, simultaneously managed several other field sampling and report writing activities.

Chemical Manufacturer - Project manager of an 8 month field sampling effort at an NPL site. The field effort consisted of 30 sampling procedures that generated 136 soil samples, 201 ground water samples, 13 air samples, 130 sediment samples, 20 surface water samples, 65 soil gas samples, 543 magnetometer readings, 15 ground water slug tests, 233 geotechnical samples and 28 trenches.

Project required daily efforts of health and safety meetings, field instrument calibration, subcontract work oversight, client coordination, property/easement access coordination, clearing of utilities for digging operations, sample collection and document/shipment, coordinate with USEPA (to include split samples) and maintaining field log reports from each of the daily activities. Project culminated into a Technical Report that stood 4 feet in height and was subsequently approved by USEPA Region 5. Also, simultaneously managed several other field sampling and report writing activities.

USAF - Managed over 160 contaminated sites mandated by the CERCLA and RCRA statutes and maintain environmental compliance for 122 UST's and 23 AST's. Finalized Work Plans, including the associated QA/QC and Health/Safety Plans, to remediate various HW and petroleum sites. Work Plans varied from remediation to hydrogeologic investigations of some 160 contaminated sites mandated by one of the following statutes: RCRA, CERCLA and IEPA's UST and TACO regulations. Each Work Plan required negotiating and obtaining the approval of the IEPA and/or USEPA.

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Leaking Underground Storage Tank (LUST) Sites – Manage several LUST sites throughout the States of Florida, Illinois and Missouri. Sites require quarterly monitoring to support natural attenuation of petroleum constituents in soil and groundwater. Approval for site to monitor only for natural attenuation required successful negotiations with the State regulators, meeting client objectives to not perform unnecessary remedial actions. Sites are progressing toward achieving State natural attenuation progression requirements for site closure without property restrictions.

Remedial Site Cleanup

Federal Facility

USAF - Subsequent to the removal of over 100 UST's, obtained IEPA approval to excavate and stage petroleum contaminated soil. Soil samples were obtained and analytical data reviewed to strategically plan and implement excavation plan. Dig permits were obtained, utility/infrastructure protected, de-watering operations and shoring devices constructed as required. Soil was staged on concrete and covered with plastic. Over 15,000 tons of soil was excavated and staged.

Subsequent to the excavation of over 15,000 tons, obtained IEPA approval to construct a low temperature thermal desorption (LTTD) operation. Operation required air permit, daily ambient air readings around the operation and daily soil samples. Over 15,000 tons of petroleum contaminated soil was remediated to meet IEPA standards.

Remedial Site Cleanup

Municipality and Industry

Municipality - Prepared conceptual designs for Missouri municipal LUST program. Design concept provided 3 alternatives for 3 separate LUST sites. Alternatives included natural attenuation/risk assessment, excavation, barrier wall, gravity flow collection pit and pump-n-treat. Alternatives evaluated logistics, abbreviated life cycle cost analysis, and remediation efficiency/effectiveness. Drafted design for a LUST with free product located beneath a historic building.

Design required to meet MDNR LUST regulations and included a basic feasibility study. This basic feasibility study evaluated natural attenuation/risk assessment, excavation/dewatering, and collection pit construction/installation. Evaluation results justified a 2 tier approach, excavation/dewatering followed by (if needed) collection pit construction/installation.

Oil Refinery – Completed environmental, health and safety (EHS) oversight of oil refinery contractors responding to a petroleum release. We teamed with oil refinery contractors to design and install an air sparge and soil vapor extraction systems as an emergency response to a petroleum spill impacting a natural creek. Installation utilized several drilling techniques to include hydrovack, geoprobe and traditional hollow stem auger. Trenching and pipe connections were completed to intercept an area encompassing approximately 5 acres of a creek embankment and several buildings that had indoor air quality issues.

The EHS oversight consisted of breathing zone air monitoring of the contractors constructing the systems and proper management of petroleum contaminated material. The EHS efforts were in accordance with a field Health and Safety Plan (HASP) that integrated the oil refineries Safe Work Practices. Remedial design was dynamic and reconfigured as field hydrogeologic parameters and site operational logistics were finalized. The emergency response was successful in minimizing the petroleum release impact on the natural creek and complied with regulator consent Order completion dates.

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Metal Manufacturer - Operate and maintain a soil vapor extraction (SVE)/air sparging remedial system at a TCE contaminated site mandated by the IDEM Voluntary Cleanup Program. Site impacted adjacent residential potable drinking water wells. Project entailed periodic ground water sampling of wells (residential and monitoring) and weekly review of remedial system performance data. Performed and/or supervised periodic repairs to pumps, electrical instruments and motors. System requires periodic balancing and operational adjustments to optimize performance. Prepared SVE/AS Optimization Plan to address asymptotic conditions.

Optimization plan included various procedures to both increase extraction well radius of influence and evaluate Air Sparge remaining production potential. Efforts include obtaining IDEM approval of both site Remedial Work Plan and procedures for closure. Annual requirements include O/M Report and semi-annual air sampling.

Aerospace - Prepared Potable Water Well Survey Report, the Well Survey Report addressed a contaminated ground water cleanup effort. The cleanup is mandated by the Florida Department of Environmental Protection (FDEP) and guided by 62 FAC 780, Contaminated Site Cleanup Criteria. The Report required the completion of a well survey to identify public groundwater supply wells within a half mile radius of the site, private groundwater wells (including potable, irrigation or industrial) within a quarter mile of site and identify public groundwater supply well recharge areas within the site boundaries.

The groundwater well survey was accomplished through interviews with representatives of the Southwest Florida Water Management District (SWFMD), Manatee County Health Department, Manatee County Property Appraiser Office (PAO) and Manatee County Environmental Management. Based on these interviews, records were obtained from SWFMD, County and PAO representatives. The results of the well survey identified 62 properties within one quarter mile of the Eaton facility that have at least one groundwater well and are presently or formerly used for potable, irrigation and/or industrial purposes.

Golf Course – Prepared remedial design to contain arsenic groundwater plume within property boundaries. Required approval of local County Environmental Department and FDEP to inject chemical fixation into the groundwater, chemical reacts with arsenic to both immobilize and precipitate arsenic from groundwater. Injection permit required from FDEP along with a Remedial Design to support natural attenuation of arsenic plume prior to off-site migration.

Injection of over 40,000 pounds of chemical fixation was completed over a two week period, followed by ground water sampling within 24, 48 and 72 hours. Reports prepared to detail remedial action implementation and groundwater monitoring submitted to Local County for approval to continue natural attenuation monitoring.

Industrial Manufacturer – Monitor and evaluate a TCE contaminated site mandated by the Missouri Department of Natural Resources (MDNR) Cleanup Program. Site impacted adjacent residential potable drinking water wells. Project entailed periodic ground water sampling of wells (residential and monitoring). Efforts include obtaining MDNR approval of both site Natural Attenuation progress and procedures for closure. Annual requirements include Natural Attenuation Monitoring (NAM) Report for MDNR approval.

Compliance Multi-Site Management

Industrial Facilities and USAF

Electroplating Company – Siegel Roberts, Inc. (Saint Louis, MO) - Managed hazardous waste and waste water generated from electroplating operations. Supervised 3 employees and a laboratory. Employees operated a WWTP and managed hazardous waste.

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Provided training to employees on laboratory equipment and procedures, use of Atomic Absorption Unit, and basic data entry using Lotus.

Communication Company (Puerto Rico) - Provided auditing services to an international communication company to establish ISO 9001, 14001 and OHSAS 18001 management systems. Project required working directly with client personnel to establish programs and procedures needed to obtain certification for each of the ISO and OHSAS systems. Mr. Tedesco completed interviews with client personnel, reviewed existing client programs/procedures and observed field operations. Utilizing the company's internal instructions, our audit team developed a management system needed to obtain ISO and OHSAS certifications.

Ship Engine Service Company - Completed annual audits, satisfying ISO 14001 certification for a marine diesel engine service provider. Workshop operations were audited for safety, health, emergency response, hazardous waste compliance, used oil management compliance and spill prevention. Audits were completed in accordance with OSHA, RCRA, CWA, CAA, EPCRA and state/county specific regulations. Audit results were summarized in a report with recommendations

Energy Company – Completed over 30 audits of various facilities used by an Energy Co. to manage and dispose of waste. Completed an Environmental Health, Safety and Transportation (EHST) compliance audit for the purpose of determining through a professional audit process if transportation and disposal contractors for the Energy Co. are managing waste disposal activities in accordance with local, state and federal regulatory requirements. The overall compliance status of the facility was evaluated. The audit's focus was the tracking, handling and disposal of waste streams generated.

The audit was initiated with a pre-audit questionnaire and list of documents necessary for the auditors to review as part of the audit. The field audit began with a review of the Facility site diagram and discussions with Facility Manager in regards to general waste management procedures. A site tour was completed (digital photos obtained) and followed by a review of Facility files along with discussions with Facility personnel. After the field audit, follow up inquiries were made and satisfied prior to the completion of a report.

Energy Company – Completed several audits of various facilities used by an Energy Co. to remediate sites with contaminated soil, groundwater and/or surface water. Audits involved review of contractor performance and ability to meet the Energy Company's Health, safety and Environmental (HSE) management procedures. The audit was initiated with a pre-audit questionnaire and list of documents necessary for the auditors to review as part of the audit. The field audit began with a review of the Facility site diagram and discussions with Facility Manager in regards to general HSE management procedures. A site tour was completed (digital photos obtained) and followed by a review of Facility files along with discussions with Facility personnel. Once the field audit was complete, a Report was generated to identify deficiencies between Energy Company HSE procedures and the contractor performance and procedures. The Report included a grade that identified the level of concern with the contractor's performance. After the field audit, follow up inquiries were made and satisfied prior to the completion of a report.

COASTAL SYSTEMS INTERNATIONAL

EDUCATION

Master of Science, Coastal Engineering, Old Dominion University, Norfolk, Virginia, 1994

Bachelor of Science, Civil Engineering, Old Dominion University, Norfolk, Virginia, 1992

LICENSURE

Professional Engineer, FL, VA

PROFESSIONAL AFFILIATIONS

Florida Engineering Society

American Society of Civil Engineers
Past-President, Miami-Dade Branch

American Society of Civil Engineers
Ports and Harbors
Committee – Engineer/Diver
Standard Task Committee

American Society of Civil Engineers
Marinas 2020 Committee

PUBLICATIONS

"Hillsboro/Deerfield Beach Nourishment: Lessons Learned," T.K. Blankenship, B. Hanson and L Neitfield Presented at 2012 FSBPA Conference

"*Boat Wake Observations at Jensen Beach, Florida*" Sheremet, A., U. Gravois, M. Tian, T. K. Blankenship, P.E., Proceedings 2011 Conference on Coastal Engineering Practice, Coasts, Oceans, Ports and Rivers, Institute (COPRI), ASCE.

"Dune Management on an Urban Coast," T.K. Blankenship, C. Brush and J. Rubin Presented at 2005 FSBPA Conference

"To Repair or Replace a Bulkhead: That is the Question," Marina Dockage, 2004

"Artificial Reef Construction: An Engineered Approach," R. H. Sasso, T.K. Blankenship, S. Higgins, and K. Banks, Feb. 2004 National Conference in Beach Preservation Technology

"Mooring Buoys for the Largest Cruise Ship in the World," J. Juhl, R.H. Sasso, T.K. Blankenship, and B. Johansen, Proceedings of Ports 2001 Conference

TIMOTHY K. BLANKENSHIP, P.E.

Coastal/Waterfront Engineer

Mr. Blankenship is responsible for all engineering production including scheduling, resource allocation, and quality management. He coordinates with the other departments within the firm including Environmental, Permitting, Field Operations and Construction.

Mr. Blankenship has over 15 years of experience in the civil and coastal engineering fields. His broad range of experience includes projects involving waterfront facility assessment and rehabilitation design, bridge engineering projects involving structural assessment, structural design and hydraulic analysis/design; land development projects including drainage design and environmental permitting, and construction phase services for several civil projects.

Mr. Blankenship is experienced in all facets of coastal engineering including the planning, design and monitoring of shore protection projects. Projects have included beach nourishment and coastal structures such as jetties, breakwaters and groynes. He has conducted numerical modeling studies of coastal processes along shorelines as well as for the design of marinas and harbors. He has also planned and conducted field investigations consisting of hydrographic surveys, oceanographic data collection, and underwater inspections.

REPRESENTATIVE PROJECT EXPERIENCE

Bayfront Street Ends Improvements, Miami Beach, Florida
CLIENT: City of Miami Beach
Bulkhead design and environmental permitting for street ends at South Shore Drive, 10th Street, 14th Street, Lincoln Road as well as Island View Park. Streetscape design for street ends at South Shore Drive, 10th Street and Lincoln Road.

Beachwalk, Miami Beach, Florida
CLIENT: City of Miami Beach
Civil/coastal engineering design and environmental permitting for the 4,000 foot on grade paver walkway that connects Lummus Park north to 21st Street in the South Beach district of Miami Beach, along with associated amenities and landscaping.

Hollywood Beach Management Strategic Plan, City of Hollywood, Florida
CLIENT: City of Hollywood/Hollywood Beach CRA
Strategic beach management planning services provided to the City of Hollywood and Hollywood Beach CRA for immediate erosional hot spot management and potential longer term solutions for beach stabilization.

Miami-Dade County Morphological Change Study, Miami-Dade County, Florida

TIMOTHY K. BLANKENSHIP, P.E.

CLIENT: Miami-Dade County
Study of volumetric and morphological changes between Bakers Haulover Inlet and Government Cut with detailed analysis on the performance of the 32nd Street Breakwater Project. Establishment of regional GIS database for beach management and update of regional sediment budget with survey data between and 1980 through 2004. Prepared recommendations for further hot-spot stabilization and backpassing beach management County-wide.

DEP State Parks Shoreline Stabilization Studies, Monroe County, Florida
CLIENT: DEP State Parks
Shoreline condition studies at Curry Hammock, Long Key, Bahia Honda, and Ft. Zachary Taylor State Parks. Feasibility for shoreline improvements and GIS work completed along with hydrographic surveys and aerial photogrammetric mapping.

Broward County Beach Restoration Project Mitigation, Florida
CLIENT: Broward County
Design/build construction of 10 acres of artificial reef offshore of Dania and Hollywood Beaches utilizing 66,000 tons of limerock boulder.

Florida Keys Sand Search, Florida Keys
CLIENT: DEP State Parks
Conducted a detailed study of available beach compatible sand for beach construction in the Florida Keys. The study included the review and evaluation of grain size, carbonate content, available quantity, transportation costs, etc. The information was used subsequently to optimize design and minimize construction cost for various beach nourishment projects for the region. This study is referenced in the Florida Department of Environmental Protection Strategic Management Plan issued in 2008 for the Florida Keys.

Hillsboro Inlet Channel Improvements, Broward County Florida
CLIENT: Hillsboro Inlet District
Coastal engineering and environmental permitting for 165,000 cubic yard inlet-dredging project to improve coastal sediment sand bypassing and navigation. Hydrographic and marine resource surveys conducted.

Rickenbacker Causeway Recreation Area, Miami-Dade County, Florida
CLIENT: Miami Dade County Public Works
Design of shoreline stabilization and associated public recreation area improvements along 2.5 miles of shoreline of Rickenbacker Causeway across Biscayne Bay. Marine resource and hydrographic surveys completed, and coastal engineering analysis conducted to assess design wave conditions, sediment transport and optimum shoreline stabilization methods. Design elements included landscaping, invasive species removal with native species restoration, parking improvements, stormwater management and vendor kiosks for waterfront activities.

TIMOTHY K. BLANKENSHIP, P.E.

Village of Key Biscayne Beach Renourishment, Miami-Dade County, Florida
CLIENT: Village of Key Biscayne
Coastal Systems is providing engineering, design, permitting and monitoring consulting services to the Village of Key Biscayne related to beach renourishment. Design, permitting and construction administration for a renourishment of the Village's 1.1 mile beach. Restoration of seagrass consulting services are also being provided related to impacts of the dredge pipeline in a former renourishment event. Developed the seagrass restoration plan and managing a sub-consultant conducting the seagrass restoration work.

Boot Key and Faro Blanco Marinas, Marathon, Florida
CLIENT: Spottswood Companies
Design of permitting of 90 slip marina redevelopment at Boot Key and 82 slip redevelopment at Faro Blanco. Processed permits through Florida DEP and U.S. Army Corps of engineers for both marinas for docks, bulkheads, and maintenance dredging.

DEP State Parks Shoreline Stabilization Studies, Monroe County, Florida
CLIENT: DEP State Parks
Shoreline condition studies at Curry Hammock, Long Key, Bahia Honda, and Ft. Zachary Taylor State Parks. Feasibility for shoreline improvements and GIS work completed along with hydrographic surveys and aerial photogrammetric mapping.

Fort Zachary Taylor State Park, Key West, Florida
CLIENT: DEP State Parks
Coastal engineering design and environmental permitting for breakwaters, jetties, and beach fill project for shoreline protection at park.

Mariners Club Phase II, Key Largo, Florida
CLIENT: EarthMark Companies
Assessment and hydrographic survey of marina and shore protection. Coastal engineering analysis for upland development.

Maranu Luxe Bungalow Spa & Resort, Key Largo, Florida
CLIENT: EarthMark Companies
Assessment and hydrographic survey of marina and shore protection. Coastal engineering analysis for upland development.

Reach Resort Pier, Key West, Florida
CLIENT: Wyndham Casa Marina Limited Partners
Coastal and structural design of beach pier at resort with wood trellis and gazebo to match Key West Historical architecture. Curved boardwalk designed to provide ADA access. Obtained environmental DEP permits and provided construction administration.

Southernmost on the Beach Hotel Seawall, Key West, Florida
CLIENT: Atlantic Shores Resort, LLC

TIMOTHY K. BLANKENSHIP, P.E.

Above/below water assessment of seawall construction, and prepare engineering report with recommendation.

Sunset Key, Key West, Florida
CLIENT: Sunset Key
Engineering assessment and surveys of shoreline stabilization after hurricane, and design of armor stone revetment repairs. Emergency environmental permitting for shoreline improvements, for marine structures repairs on main island including floating docks, bulkheads and wave barrier.

Wyndham Casa Marina Resort Pier, Key West, Florida
CLIENT: Wyndham Resorts
Coastal and structural design of swimming pier and fishing pier with boat slips and gazebo. Secured environmental permits and provided construction administration.

SANDRA WALTERS
President

ACADEMIC BACKGROUND

Masters Degree in Marine Studies, University of Miami, Florida, 1983
Bachelor of Science in Animal Behavior and Marine Biology, University of California, Davis, CA, 1974

SPECIALIZED PROFESSIONAL COMPETENCE

Ms. Walters has 30+ years of professional experience in Florida. She is qualified as an Expert Witness in Florida administrative hearings and court proceedings; has conducted and supervised environmental studies, and developed avoidance and mitigation plans, in all South Florida submerged and upland habitats; has successfully permitted projects ranging from single family homes to developments of regional impact, working with all regulatory agencies; has conducted Phase I and II Environmental Site Assessments, fuel storage tank removals, and acquired No Further Action decisions for many properties; has extensive experience in design and implementation of public participation programs and review and development of comprehensive plans; and has represented clients successfully with many agencies and government boards. She is presently a member of the South Florida Regional Planning Council, appointed by governors Bush, Crist and Scott, serving as chair in 2009; serves on EPA's Water Quality Steering Committee for the Florida Keys National Marine Sanctuary; and served from 2000 to 2004 as a Governor's appointee on Florida's Acquisition and Restoration Council, which supervises purchase and management of State conservation lands.

REPRESENTATIVE PROFESSIONAL EXPERIENCE

Principal, Sandra Walters Consultants, Inc., Key West, Miami, Hollywood & Fort Myers, FL, 1996-present
Provide consulting services to both public and private sector clients in areas of ecological/environmental and land use planning and permitting, including habitat evaluation, mitigation and contamination assessment and remediation; public involvement and outreach; and community and government liaison.

CONTAMINATION SERVICES

- **Pier 1 Petroleum Remediation Estimated Pricing, Port Everglades Master Plan Update**
  Principal in charge of site assessment report review and preparation of preliminary estimate of remediation costs, including mobilization; excavation and disposal of overburden; free product and water removal, temporary storage, characterization sampling, and disposal/recycling; site stabilization, remediation design and bidding; and remediation management and oversight.
- **Monroe County Airport Department**
  Retained to advise director regarding contamination issues involving spill at Key West Airport fuel farm.
- **Contamination Assessment, Stock Island Fire Station Property, Monroe County Government**
  Principal in charge of evaluation of earlier contamination reports and visible contamination evidence at vacant parcels where new fire station is being built, preparation and implementation of assessment including sampling and testing soils, implemented remediation, and preparation of final report indicating no further action required.
- **Spill Prevention Control and Countermeasure Plan (SPCC), Florida Keys Aqueduct Authority, Marathon, FL**
  Principal in charge of plan preparation for FKAA facility consistent with State and federal requirements that specified how oils and fuels were stored, what spill prevention measures were in place, and what steps would be taken if a spill should occur, including notification procedures and contact lists.
- **Monroe County Mosquito Control District, Monroe County, FL**
  Reviewed third-party environmental site assessment for 107th Avenue site in Marathon in process of purchase by District for new facility, completed ESA scope as specified by ASTM guidelines, and provided final finding.
- **City of Key West Engineering Services**
  Provided ongoing groundwater testing, analysis and reporting services for former underground fuel storage tank site at Key West City Hall; prepare and process application for No Further Action with conditions.
- **Phase I and II Environmental Site Assessments, Florida Keys**
  Conduct environmental site assessments for commercial real estate transactions and transportation projects. Conducted assessments following ASTM guidelines for District 4 FDOT and many public agencies and private property owners throughout Florida Keys. Also was qualified and provided expert witness testimony in circuit court regarding Phase I ESA scope and ASTM guidelines.
- **Discount Rock & Sand, Marathon, FL**
  Conducted assessment of property and analyzed its redevelopment potential under the City of Marathon Comprehensive Plan and Land Development Regulations, including State regulation for construction and demolition debris disposal facilities; documented and analyzed historic and existing site conditions. Prepared, processed and acquired permit for facility from Florida Department of Environmental Protection, currently working on acquiring final building approval from City of Marathon.
- **Bayview Inn, Conch Key, Monroe County, FL**
  Conduct testing and analysis of groundwater to determine status of remaining contamination resulting from removed underground fuel tank, prepared and successfully processed proposal for No Further Action with Conditions with DEP.
- **Watermark Marina Site Investigation, Islamorada, FL**
  Principal in charge of extensive sampling and testing to assess contamination at marina site.

- **Tank Removal and Contamination Assessment, Tropical Reef Resort, Islamorada, Florida**
  Provide quality assurance supervision of SWC staff in charge of underground fuel storage tank removal, soil and groundwater testing and analysis, and preparation and submittal to Florida Department of Health of contamination assessment report and No Further Action proposal, which was approved.

- **Robbie's Safe Harbor Marine Enterprises, Inc., Florida Keys**
  Develop agreements with Florida Department of Environmental Protection for solid waste cleanup and above-ground fuel storage tank removal, including field testing, preparation and submittal of tank closure assessment report (TCAR). Prepare and process solid waste transfer station general permit, including representation as expert witness at State administrative hearing decided in client's favor.

ENVIRONMENTAL STUDIES • PERMITTING • MITIGATION • MONITORING SERVICES

- **Horizontal Directional Drill Permitting and Third Party Environmental Monitoring, Islamorada Wastewater Project**
  In charge of permitting with DEP, USACE and FKNMS for directional drills under seven channels in Upper Florida Keys to accommodate wastewater pipelines. Work involved extensive coordination with project engineers, contractors, resource management and regulatory agencies; benthic and emergent habitat assessments including detailed mapping and characterization of resources below which pipeline will run; preparation and processing of permit applications; and responses to requests for additional information. Acquired all permits in less than three months due to extensive agency coordination and very-thorough permit application materials. Conducted work as full-time third party environmental monitor for all drilling activities, including constant onsite inspections and oversight; coordination with drilling company and environmental agencies; water quality, wetlands and submerged habitat data collection in the event of a possible frac out of drill operation to document impacts; and preparation of summary reports.

- **Tarpon Pier Replacement, City of Key West**
  SWC was in charge of environmental data collection, and development and implementation of an impact assessment and mitigation plan, for replacement of existing City pier in Garrison Bight. Work included mapping submerged resources including seagrasses and corals, coordination with the Florida Keys National Marine Sanctuary and Florida Department of Environmental Protection, and transplantation of impacted corals consistent with Sanctuary requirements.

- **Mallory Dock Maintenance Dredge, City of Key West**
  Principal in charge for successful acquisition of USACE and DEP permit modifications to add Mallory Dock to scope of Navy Key West Harbor dredging project, including collection of all data on submerged habitats required by agencies, coordination with dredging company and environmental monitoring contractor, acquisition of EPA approval for use of offshore disposal site and provision of Quality Assurance services onboard the dredging vessel. Represented City in Navy agency partnership process for harbor dredge and other environmental issues.

- **S. Roosevelt Seawall Repair Seagrass Monitoring, Key West**
  Supervised assessment and documentation of seagrasses in vicinity of seawall undergoing repairs, including field data collection and photography, update of CAD files delineating seagrass line, measurement of seagrass impacts in project area for mitigation purposes, and report preparation.

- **Smathers Beach Seagrass Mitigation Monitoring, Key West**
  Member of team that conducted field monitoring of seagrass mitigation project for City of Key West. Roles included field personnel establishing monitoring sites, collecting required data, supervising surveyor, assisting with preparation of monitoring reports, and providing local liaison with City and base of operation for work.

- **Key West Mooring Field Pilot Project**
  Principal in charge of conducting 1-year, monthly data collection, analysis and report preparation for moored vessels around Key West Mooring Field as part of County and State mooring field pilot project.

- **Key West Mooring Field Seagrass Monitoring Project**
  Conducted 3-year seagrass monitoring project at Key West Mooring Field that investigated potential shading impacts from boats, including project design, photographic documentation of stations over time, collection of seagrass density and shoot count data, report preparation and report submittal and processing with DEP. This study was first of its kind in Florida, and several other coastal communities have requested copies of final report.

- **Submerged Habitat Study and Sediment Analysis, Key West Harbor and Vicinity**
  Conduct survey of submerged habitats in and around Key West Harbor. Divers collected field data from 50, randomly selected sites. This data was then collated into maps showing general distribution of habitats in area, and underwater photographs were organized and printed. Data was compared with that collected at other sites throughout Florida Keys, to assess habitat quality in relation to shipping activities in Harbor. Supervise collection of sediment samples in and near harbor following approved DEP protocol, transmit to State certified laboratory for testing for petroleum contamination and RCRA metals, prepare report summarizing findings.

- **City of Key West Stormwater System**
  Consultant in charge of bringing City into compliance with ERP requirements for already-completed and future maintenance work of stormwater system, including mapping and characterizing affected wetlands, and developing impact assessment and mitigation plan that

incorporates 5.6 acres of wetland restoration and enhancement at former Hawk Missile site in eastern Salt Ponds and creation of connection between Riviera Canal and western Salt Ponds to enhance 131 acres of wetlands and cause significant water-quality improvements. Served as City representative in negotiating a consent agreement with South Florida Water Management District that was unanimously adopted by District Governing Board and City Commission.

- **City of Key West Navy Base Reuse Plan**
  Member of team that evaluated Key West surplus Navy properties and developed reuse plan. Primary role—planning and environmental assessments including SCUBA examination of Truman Waterfront Mole Pier.

- **General Environmental Consultant, City of Key West**
  Was awarded general contract for City services, and ranked by City Commission number one of three firms being contracted.

- **Permit Compliance for Large Condominium Complex (Seaside and Salt Ponds), Key West, FL**
  Retained by property owner to assist with resolution of permit compliance issues with South Florida Water Management District; conducted extensive research of permitting and project history, held meeting with District staff and developed consensus on approach, developed consent agreement, worked with property owner to design and implement significant restoration project in Salt Ponds as well as to restructure onsite restoration projects from those specified in original permits, in progress with implementing multi-year monitoring plan; property owner received award from District for being so forthcoming with restoration efforts and award ceremony had front-page article in local newspaper.

- **Electric Transmission Line Environmental Compliance Monitoring, Florida Keys**
  Conducted DEP and USACE permit conditions environmental compliance monitoring of installation of new electric tie-line poles between Big Coppitt Key and Key Haven in wetland and submerged habitats, including confirmation of pre-construction conditions, onsite inspections to assure impacts do not exceed limits established in environmental permits, and long-term monitoring to document post-construction recovery.

- **Residential Redevelopment Project in Marathon, Florida Keys**
  Served as project manager for all aspects of environmental planning and permits for 99-slip, 92-unit redevelopment project in Marathon called Marlin Bay Yacht Club, including supervision of all field data collection and preparation of benthic assessments and avoidance and minimization plans, supervision of application preparation and submittal and all responses to requests for additional information, work with DEP to acquire net positive public benefit exception to State submerged land lease riparian restriction, and presentations to Governor and Cabinet regarding lease rule provisions and final lease adoption. Acquired permit and submerged land lease in nine months of filing application.

- **Jewfish Creek Bridge/US Highway 1 Project, Northern Florida Keys**
  Member of design-build team in charge of environmental compliance for final design and construction of 65-foot-high bridge over Jewfish Creek and new roadway from North Key Largo to just south of Dade County line, including training of onsite personnel regarding avoidance of listed species; coordination with agencies for permit modifications; assessment of preconstruction environmental conditions; and continuous work with project engineer and contractor to assure all environmental permit conditions are met during four-year project. Work included mapping seagrasses along project corridor.

- **La Siesta Resort and Marina, Islamorada, FL**
  Served as principal in charge of benthic assessment and ERP impact assessment and mitigation plan for oceanside and bayside entrance channels and marina basins, including seagrass restoration plan to restore orphan propeller scars in Lignum Vitae State Aquatic Preserve.

- **Dock Appeal Benthic Assessment and Expert Witness Testimony, Upper Florida Keys**
  Conducted extensive benthic resource mapping of nearshore habitats in relation to location of single-family home dock that was subject of neighbor appeal of DEP permit, prepared expert witness report, participated in deposition in preparation of hearing before administrative law judge.

- **Grassy Key Beach Cleanup, Florida Keys**
  Provided onsite ecological oversight of beach cleanup operation conducted by contractor for DEP, assuring heavy equipment did not harm biological resources and removed only storm-deposited dead seagrass and sediments as specified by DEP and USACE.

- **Cudjoe Key Quarry, Florida Keys**
  Planning and permitting for continuation of existing rockmining operation. Develop wetland and endangered species habitat mitigation plan which has received endorsement of USFWS and Florida Game and Fresh Water Fish Commission (FWC) staff; prepare and process DEP and USACE permit applications; process County vested rights application; successfully negotiate development agreement with Monroe County and Florida Department of Community Affairs (DCA). For new owner, prepare and successfully process permit modifications for change of land use to communications facility, successfully negotiate new development agreement with DCA, prepare and process Monroe County permit application, prepare testimony and appear as witness in local court hearing regarding County moratorium on communication facilities.

- **Former Silver Eagle Distributors property, Key West**
  Conducted monitoring of mitigation required by environmental resource permit and closed out South Florida Water Management District permitting requirements; following issuance by District of letter of concern regarding perpetual maintenance issues, worked

with local police and several non-profit organizations to assist property owner with issues regarding homeless population living within a preservation area and removal of trash and exotic vegetation from site, in order to a find win-win solution and achieve compliance with SFWMD permit.

- **General Environmental Consultant for Florida Keys Overseas Heritage Trail**
  In contract with DEP, provided environmental planning services for entire 130-mile linear park throughout Florida Keys, including NEPA review and documentation for permitting of segments and bridge crossings.
- **Stormwater Filter Marsh, City of Naples, Collier County**
  In charge of wetland jurisdictional determination, habitat evaluation, and threatened and endangered (T&E) species survey; development of impact assessment and mitigation plan, as needed; and general assistance with preparing and processing environmental resource permit (ERP) applications with DEP and US Army Corps of Engineers (USACE) for creation of filter marsh to provide treatment to stormwater presently being pumped untreated into Naples Bay.
- **Tree Obstruction Survey, Hollywood-Ft. Lauderdale International Airport, Broward County**
  Principal in charge of tree obstruction survey and report for entire airport property. Work includes field data collection and preparation of report including a detailed spreadsheet with tree specifications and recommend-dations for trimming or removal, aerial figures showing all tree locations, and photo exhibits.
- **Environmental Impact Study & Permitting, Ft. Lauder-dale-Hollywood International Airport Runway Extension**
  Principal in charge of fulfillment of all NEPA requirements including T&E species impact assessment and wetland delineation, coordination with environmental regulatory agencies, and preparation and processing of environmental permit applications for final, selected alternative. Acquired concurrence from all resource agencies on jurisdictional lines and UMAM scores for all wetlands affected by one or more project alternatives, prepared administrative draft and Draft Environmental Impact Statement, participated in DEIS public hearing, prepared EFH and Biological assessments for National Marine Fisheries Service and U.S. Fish & Wildlife Service, prepared responses to all ecological questions for DEIS and FEIS; assisted with preparation of Final EIS.
- **Port Everglades Master Plan Update, Broward County**
  Principal in charge of all natural systems data collection and analysis and permitting assessments for five-year master plan update, including incorporation of updated plan into County comprehensive plan.
- **SR-710 PD&E Study, District 4 FDOT**
  Part of consultant team in charge of planning, design and environmental study of 27-mile corridor of B-Line Expressway through Palm Beach and Martin counties. Responsible for wetlands and threatened and endangered species field data collection, assessment of contamination potential in vicinity, and documentation of land use patterns along corridor regarding potential for secondary and cumulative impacts.
- **Wetland Delineation, Essential Fish Habitat Assessment and Local Permitting Support for Utility Corridor, Okeechobee, Hills-borough and Miami-Dade counties**
  Principal in charge of wetland data collection and jurisdictional delineation for utility corridor, utilizing both federal and State wetland delineation methodologies, including extensive habitat characterization, mapping using sub-foot-accuracy Trimble GPS equipment, and daily downloading and transmitting of data to central processing facility. Also prepared EFH Assessment meeting NMFS requirements for South Dade County segment, including cumulative and secondary impacts analyses, and provided coordination and assistance with local permitting in Martin and Miami-Dade counties.
- **WTA Compartments B & C Environmental Impact Study (EIS), SFWMD, Palm Beach County**
  Part of consultant team that developed EIS for improvements to water treatment areas just south of Lake Okeechobee, which is an Acceler8 project associated with Everglades restoration. Work includes full assessment of existing data and sources and evaluation of sufficiency; drafting environmental consequences alternatives, wetlands and T&E species sections; and participating in public involvement activities.
- **Herbert Hoover Dike Culverts 1 and 1A Replacement Project, Glades County, FL**
  In charge of all start-up of environmental compliance scope for $47 million project to replace two 10-foot culverts through the Herbert Hoover Dike near Lake Okeechobee. Work included preparation of Stormwater Pollution Protection Plan (SWPPP) and NPDES notification; development of Environmental Protection Plan; permitting of dewatering plan; development of boating Maintenance of Traffic (MOT) plan; contractor training regarding environmental compliance criteria, including development and printing of waterproof field compliance handbook; turbidity monitoring and reporting, including staff training to meet State permit criteria and work supervision; monitoring of 10 listed species; and preparation and processing of required reports. All plans and reports received U.S. Army Corps of Engineers approval.
- **General Engineering Services, City of Pompano Beach and City of Ft. Lauderdale, Broward County**
  Part of consulting team providing engineering services to the City, with SWC scope including environmental, planning and public involvement tasks.

LAND USE PLANNING AND PERMITTING • PUBLIC INVOLVEMENT SERVICES

- **District Six FDOT Communication Services for Construction Projects, Monroe County**
  SWC is serving as prime contractor to provide communications services for all FDOT District Six

construction projects throughout Monroe County. This includes a full-time public information specialist for the 2.1-mile North Roosevelt Boulevard project in Key West. SWC is currently managing 11 Keyswide assignments.

- **District Six FDOT General Public Information Contract for Design Services, Monroe County**
  SWC is member of consulting team that was just awarded a three-year contract for general design services public information and will be responsible for all of Monroe County. SWC previously provided these services for five years under an earlier contract. Work has included US Highway 1 corridors on Big Coppitt Key, from Key West to Stock Island, Big Pine Key, Cudjoe Key and Grassy Key.

- **FDOT Planning, Design & Environmental (PD&E) Studies in Islamorada, Marathon and Big Coppitt Key, Florida Keys**
  Member of team that conducted FDOT studies of roadway improvements, including turn lanes, in five-mile corridor in Islamorada, five-mile corridor in Big Coppitt Key, and Sombrero Beach Road in Marathon. Services included public involvement, land use planning, and landscape architecture elements of study, including coordination with local staff and elected officials.

- **Stock Island-Key Haven US 1 Corridor Study, Florida Keys**
  Provided public involvement outreach and meeting coordination services for study to identify improvements to US 1 corridor segment; resulted in significant participation by user groups and relevant and effective planning charrette.

- **Expert Planning Services for Town of Medley, Dade County**
  Served as town planning staff, providing review and support for public hearings for adoption of City ordinance.

- **Hawk's Cay Expansion Development of Regional Impact, Florida Keys**
  Prepared and successfully processed Application for Development Approval for Hawk's Cay Expansion Development of Regional Impact to South Florida Regional Planning Council. Evaluation included environmental, public facilities, socio-economic, and traffic impacts. Provided continued planning consultation, including 1996 approval of major site plan revision and 7 year extension, approvals of three DRI revisions, and annual reports.

- **Rezoning and Development Agreement for 92-unit Project, City of Marathon, Florida Keys**
  Served as principal planning consultant and agent for 92-unit redevelopment project, including recent acquisition of property rezoning and executed development agreement from Marathon City Council. Work involved representation with planning staff, Council members and Florida Department of Community Affairs representatives; and work with Florida Department of Environmental Protection and Governor and Cabinet regarding submerged land lease for 115-slip private marina.

- **Monroe County Planning Services for Expansion, Parrotdise Restaurant, Little Torch Key**
  Prepared and successfully processed application for conditional use to expand restaurant, including detailed site planning and conceptual stormwater management system; prepared and successfully processed alcoholic beverage permit to provide for outdoor food and beverage service, including thorough review of sound ordinance issues and presentation of findings to Planning Commission.

- **Lower Sugarloaf Key Mixed Use Development, Lower Florida Keys**
  Served as planning consultant and agent, developed and processed major conditional use application for mixed use office, workforce housing and market-rate housing project; received 8/0 positive vote from Monroe County Development Review Committee and 5/0 positive vote from Monroe County Planning Commission.

- **Key West Transfer Station & Hauling Services, Inc.**
  Prepared and successfully processed application to DEP for renewal of solid waste transfer station permit that provides for substantial expansion and updating of facility, including supervising CADD drawings, engineering of site and preparation of environmental resource permit application for stormwater system, coordination with agency staff to assure application meets standards, and responses to information sufficiency reviews. Participate as expert for client by deposition in lawsuit by competing business.

- **State Aquatic Preserve Management Plan, Florida Department of Environmental Protection**
  Responsible for principal drafting of Statewide management plan for 41 State aquatic preserves.

- **Expert Witness Testimony for Monroe County**
  Conducted thorough review of land use, environmental and permitting issues for property in North Key Largo which was subject of suit against Monroe County, prepare expert witness report, provide deposition in circuit court proceeding. Work included extensive review of several USFWS HCPs in Key Largo for effects on reasonable development expectations in area.

- **City of Key West Bahama Village Redevelopment Plan Update**
  Member of team that updated community redevelopment plan. Primary roles—environmental and public facilities planning; and public involvement, including preparation and distribution of project newsletters and news releases; and development and implementation of proactive community involvement process.

- **City of Key West Economic Development Conveyance Application**
  Member of team that developed EDC application for surplus Navy properties. Primary roles—planning and implementing meetings with local officials and interest groups, coordination of public workshops and presentations, and public facilities and environmental data collection and analysis.

- **Marx Investments, LLC Development Feasibility Study, Big Coppitt Key, FL**

Document and analysis historic and existing site conditions; prepare feasibility study to determine the development potential for the property under the regulations of the Monroe County Comprehensive Plan and Land Development Regulations.

- **Habitat Conservation Plan (HCP) and Community Plan for Big Pine Key, Monroe County, FL**
  Represented affected property owners to develop HCP following US Fish & Wildlife Service (USFWS) guidelines for federally-endangered Key Deer on Big Pine and No Name keys in Florida Keys. The County implemented parallel process to develop community plan that incorporates HCP into County comprehensive plan and land development regulations. System developed involves complex point system for incidental takings associated with any new structure, and requires mitigation to compensate for impacts associated with issuance of building permits.

Vice President & Manager of Environmental and Permitting Division, HJ Ross Associates, Inc., Coral Gables, FL, 1994-1996
Create new division of company, manage personnel and project budgets, develop project proposals.

- **US Highway 1 South Project, from Key Largo to Florida City**
  Consultant Project Manager—assist Florida Department of Transportation, District 6, in permitting for expansion of 20-miles stretch of US Highway 1, including construction of new bridge with 65 foot water clearance at Jewfish Creek. Permits were required from U.S. Coast Guard, South Florida Water Management District, and ACOE, and coordination with Dade County Department of Environmental Resources Management. Work included preparation of permit applications; creating CADD generated permit sketches; responding to information sufficiency reviews (including extensive evaluation of potential secondary impacts of project on community and environment); supervising field investigations for construction projects and associated mitigation (including mangrove, seagrass, and freshwater emergent habitats); public information; and coordinating with many commenting agencies.
- **Development of Regional Impact Application and Environmental Impact Statement for New Runway at Miami International Airport**
  HJR project manager for preparation of sections of documents, and overall quality control and editing.

Publisher and Media Consultant, Little Torch Key, FL, 1986-1994
Co-found, and serve as co-publisher and managing editor for seven years of *Island Navigator* newspaper, a feature monthly publication distributed throughout the Florida Keys. Also manage media division working with all kinds of print and broadcast media in production and scheduling of public information and advertising campaigns.

Environmental Planning Consultant, Little Torch Key, FL, 1984-1996
Site evaluation and project design for many commercial and residential parcels of property in the Florida Keys, including acquisition of permits from local, state, and federal agencies; policy analysis and legislative support; expert testimony at Florida administrative hearings; and public information programs.

- Prepare and successfully submit Application for Development Approval for Hawk's Cay Expansion Development of Regional Impact (at Mile Marker 61 in Florida Keys) to the South Florida Regional Planning Council. Evaluation included environmental, public facilities, socio-economic, and traffic impacts. Also annual reports and continuing planning work.
- Provide expert witness testimony in administrative hearing regarding appeal by FL Dept. of Community Affairs of Monroe County development order for beachfront property on Lower Sugarloaf Key.
- Provide expert witness testimony in administrative hearing regarding environmental permitting for marina project on Little Torch Key.
- Successful application to State Conservation and Recreation Lands program for purchase of Big Pine Key property.
- Appointment by Monroe County Mayor to Blue-Ribbon Committee to review land use plan; served as advisor to Monroe County Commission; and conducted South Florida Regional Planning Council review of draft plan.
- Extensive research and detailed report regarding impacts of inclusion of Florida Keys in federal Undeveloped Coastal Barrier Program.

Environmental Programs Manager, 1980-1984
South Florida Regional Planning Council, Hollywood, FL
Review comprehensive plans of counties and municipalities in South Florida, evaluate in relation to State and regional policy guidelines, and write evaluations including recommendations for improvements. Participate in and manage reviews of Developments of Regional Impact, with emphasis in areas of environmental and public facilities impacts. Environmental programs manager responsible for analyzing and critiquing environmental aspects of development in region, including U.S. Army Corps of Engineers and Florida Department of Environmental Regulation dredge and fill permit applications; prepare and present reports to Council concerning development warranting regional attention.

- **Development of Regional Impact Review**
  Broward County—Ball Point, Design Center of the Americas, FEC Industrial Park, Harrison Park, Houston Park Marina, Pompano Industrial Park, Weston Phase II; ***Dade County***—Airport Corporate Center, American Bankers Industrial Group, Homestead Bayfront Park & Marina, Chapman Field Park & Marina, Brickell Bay Office Tower, Terremark Centre, 1111 Brickell, SE 8th Street & Brickell Avenue, Watson Island; ***Monroe County***—Port Bougainville/Garden Cove.
- **Court Testimony**

Gave deposition as witness for Dade County, FL in District court case involving beach restoration project on Key Biscayne.

- **Project Manager: South Florida Oil Spill Priority Protection Response Strategy**
  Prepare detailed work program and budget. Supervise consultant in conducting extensive detailed study and mapping of South Florida coastal marine resources in relation to sensitivity to spilled oil. Supervise consultant in writing, editing, graphics, and printing of Environmental Sensitivity Index maps and report titled The Sensitivity of Coastal Environments and Wildlife to Spilled Oil in South Florida. Atlas and report won first prize from Florida branch of American Planning Association, 1981. Coordinate interest groups and agencies for implementation of strategy, including:
  - inventory of cleanup equipment and contact personnel in region
  - determination of appropriate spill responses and communication channels
  - preparation of regional oil spill response handbook
  - distribution of all project products and provision of public information concerning project, including presentations at local, state, and national meetings
- **Project Manager: Regional Hazardous Waste Program required by State of Florida Water Quality Assurance Act**
  Coordinate Broward, Dade, and Monroe counties and Florida Department of Environmental Regulation in South Florida program implementation. Develop and distribute consultant request for proposals. Write and execute contracts between Council and State, counties, and consultant for administration of $490,000 in State funds for program tasks. Coordinate public information. Review progress reports, assure contract compliance, authorize funds disbursement.
- **South Florida Hurricane Evacuation Program (Broward, Dade, and Monroe counties)**
  Project Manager: Coordinated U.S. Army Corps of Engineers, technical consultant and local agency task force in plan preparation; developed and implemented public information program.

Sea Awareness Environmental Education Programs, Miami and Little Torch Key, FL, 1976-1981
Develop, market, and run natural history tours for general public to variety of destinations in South Florida and Caribbean.

Adult Education Instructor, 1977-1980
Coral Gables High School & Key Biscayne Community School, Miami, FL
Design, promote, and teach full-semester courses in coastal natural systems of South Florida to adults of all ages and backgrounds.

Research Assistant, 1976-1980
Rosenstiel School of Marine & Atmospheric Science, University of Miami, FL

- South Florida marine mammal salvage program, conduct study of West Indian manatee to stop deaths in flood control structures, take field data and conduct necropsies, analyze data for comparative studies.
- Analysis of infauna at potential sewage outfall site in South Florida.
- Analysis of sediment plume duration and path during dredging in Biscayne Bay.
- Analysis of fish populations on South Atlantic continental shelf for OCS oil and gas lease EIS.

Marine Biologist, Oceanic Society Charters, Belize, Central America, 1975-1976
Provide educational and research programs in tropical marine ecosystems for sailing/diving charter groups.

PROFESSIONAL REGISTRATIONS/AFFILIATIONS/CERTIFICATIONS

- Serving since 2005 on South Florida Regional Planning Council appointed by Governors Bush, Crist and Scott, board that oversees planning and regional issues for Broward, Dade and Monroe counties. Served as chair in 2009, currently serving as treasurer.
- Member, EPA Water Quality Steering Committee for Florida Keys National Marine Sanctuary
- Appointed in May 2000 by Governor Bush to four-year term on Florida's Acquisition and Restoration Council, which oversees purchase and management of State conservation lands
- Key West Utility Board Advisory Committee
- Certified Woman-owned Business Enterprise (WBE) and Disadvantaged Business Enterprise (DBE) with Florida Department of Transportation; State of Florida; South Florida Water Management District; Miami-Dade (also SBE), Broward (also CBE) and Lee counties; certified Woman-Owned Small Business (WOSB) with federal government
- Former president, Monroe County Federation of Chambers of Commerce; former president, Lower Keys Chamber of Commerce; current member, Key Largo, Islamorada, Marathon, Lower Keys and Key West chambers
- Associate member, Marathon and Lower Keys Association of Realtors
- Member, Florida Keys Contractors Association
- Member, Florida Association of Environmental Professionals and board member of South Florida chapter
- Member, National Water Resources Association and Florida chapter
- Certified diver, PADI #9501031862, advanced research certification from University of California at Davis and Rosenstiel School of Marine and Atmospheric Science, University of Miami

JAMES BRUSH
Project Engineer

ACADEMIC BACKGROUND
BA, LAS Physics, University of Illinois, Urbana IL, 1972
MS, Environmental Engineering in Civil Engineering, University of Illinois, Urbana IL, 1977

PROFESSIONAL REGISTRATIONS
Professional Engineer in six states: FL, TX, IL, IN, MS & AL
Grade A Water Treatment Plant Operator, Texas
Class A Water Treatment Plant Operator, Illinois
Class 4 Wastewater Treatment Plant Operator, Illinois

SPECIALIZED PROFESSIONAL COMPETENCE
During Mr. Brush's career in civil and environmental engineering he has provided consulting and construction management services to industry and government with emphasis in industrial and hazardous waste management, site investigations, remediation/contamination cleanup, groundwater monitoring; underground fuel storage tank closures; fuel storage facilities inspections and certifications. He also has extensive civil and marine engineering experience, having designed a number of stormwater management systems as well as site development and marina projects.

REPRESENTATIVE PROFESSIONAL EXPERIENCE

Project Engineer, SWC, Key West and Miami, 2000-2008, 2012 to present

CONTAMINATION-RELATED WORK

- **Bayview Inn, Conch Key, Monroe County, FL**
  Work with SWC to provide engineering services associated with preparation of successful application for DEP determination of No Further Action with Conditions for underground storage tank leak.

- **Wild Bill's Gas Station, Grassy Key, City of Marathon, Monroe County, FL**
  Work with SWC to design and implement an assessment methodology for a site containing a heavily leaking underground fuel storage tank, including installation of monitoring wells, collection of soil and groundwater samples, evaluation of testing results, and development of a site assessment report for the Florida Department of Environmental Protection (DEP).

- **Watermark Marina of Islamorada Site Development—Environmental Due Diligence Site Investigation, Islamorada, FL**
  Provided civil engineering services. Work included site investigation geotechnical drilling, sampling and assessment/recommendation/cost evaluation report for the clean-up of soils and bay bottom sediment contaminated with boatyard boat bottom paint residues, site layout, coordination of survey, geotechnical study coordination, permitting, drainage, site grading, coordination of architect's plans and specifications for upgraded marina and dock facilities with site civil infrastructure

- **Key West Transfer Station, Stock Island, Monroe County, FL**
  Work with SWC to design and process DEP environmental resource permit application for stormwater system, and provide all engineering services for preparation of solid waste transfer station permit renewal application.

- **City of Key West, Monroe County, FL**
  Work with SWC on groundwater monitoring and reporting with Florida Department of Environmental Protection for remediation of underground fuel tank leak.

CIVIL ENGINEERING WORK

- **Sunset Condo Gardens, Sunset Marina, Stock Island, Key West**
  Provided architectural/engineering services to develop a recreation area for an existing condominium complex. Work including site development, civil infrastructure, coordination of survey and geotechnical work, design and site layout, stormwater retention, new roadway, fencing, walkways, paving, sanitary sewers, site drainage and grading, landscaping, mechanical, electrical, new swimming pool/spa, new beach area, tiki hut eatery, and bar-kitchen area, and a concrete block cabana building with bathhouse and storage facilities.

- **Parrotdise Restaurant Conceptual Stormwater Management Plan, Little Torch Key**
  Prepared conceptual drainage plan for conditional use application for expansion of restaurant to meet County

and SFWMD standards, including all calculations and graphic presentations.

- **Key Deer Refuge Stormwater Plan, Big Pine Key**
  Worked with SWC to prepare drainage plan for parking lot at Blue Hole on Key Deer Boulevard to meet County and SFWMD standards, including all calculations and graphic presentations.
- **Silverking Marina, Stock Island**
  Developed site plan and stormwater management plan for marina, including all calculations and design features to meet County and South Florida Water Management District (SFWMD) permit requirements.
- **LaSiesta Resort and Marina (bayside and ocean-side), Islamorada, FL**
  Provided civil engineering services. Work included site redevelopment layout and civil infrastructure, coordination of survey, geotechnical, study coordination, design, site layout, stormwater retention swales and exfiltration trenches, new roadways, paving, sanitary sewers, site drainage, site grading, Monroe County, Islamorada, and SFWMD stormwater permit applications, storm sewers, utilities, new marina and dock facilities, coordination with architect's new condominium plans with site civil infrastructure and site conditions.

City of Key West, Monroe County, FL, 1999-2008
Provided civil engineering project management, permitting, design and construction phase services for docks, pier extensions, marina dredging plan, bay bottom dredge sediment sampling, pollutant characterization, marina restroom facilities, pump-out systems, fueling facilities, new boat ramp, marina operation and maintenance manual, fueling system assessment, marina stormwater management plans, sovereign submerged land leases.

- **City Marina at Garrison Bight Ramp Extension, Fuel Dock, and Sewage Pump Out System**
  Provided professional engineering to the City Port Authority for the design and acquisition of US Army Corps Engineers and Florida Department of Environmental Protection (DEP) Permits for a ramp extension, fueling facilities, and boat sewage pump out & pipeline system. Work included developing a site plan, system layout, evaluation of vendor performance claims, design calculations, plans and specifications, bidding and construction services.

- **City of Key West Ferry Terminal Pier Extension**
  Provided professional engineering to the City Port Authority for design and acquisition of US Army Corps Engineers and DEP permits for the extension of the Ferry Terminal Pier at the site of the historic Trumbo Havana Pier. Work included design, plans and specifications for extending an existing concrete pier to add additional slips for ferry future service, including bay bottom contaminant testing & dredging plan. FDEP and USACE permits issued. Key West Bight Ferry Terminal provides facilities for ferries that serve Ft. Myers, Marco Island, Miami, and Caribbean.
- **Ferry Terminal Phase II Security Access Ramp**
  Prepared documents requested by USACE, FDEP, USN, MCEM, USDHS, regarding pier extension, ferry terminal operation, submerged land lease issues, security access & monitoring. Prepared additional required documents such as Marina Operation & Management Plan, Pump-out System Assessment Report, Fueling System Assessment Report, Oil Spill Contingency Plan, SWPPP, SPCC; Clean Marina Application; Report on South Florida marina operation methodologies for comparison to be implemented by Port Authority. Permits issued.
- **Garrison Bight Marina Stormwater Pollution Prevention Plan (SWPPP)**
  Assisted the Marina and Port Authority on the development of the Marina's SWPPP.
- **Garrison Bight Mooring Field Dinghy Dock Restroom Facility**
  Provided professional engineering services to the Port Authority for the design, specifications, bidding, construction-phase services for a new restroom facility that serves Mooring Field tenants. Work included civil engineering, site layout, new sanitary sewer, water, electrical utilities, and permits.
- **Key West Public Safety Facilities Building**
  Design of a backup entrance/exit for fire trucks, just in case of blocked main access point on Roosevelt Blvd. The project involved design of 30' wide x 80' long concrete access driveway bridge was across a mangrove lagoon; as well as, lagoon contaminant testing/dredging plan, fish ladder, fish hatchery, public environmental educational signs, trimming mangrove prop roots, silt removal, cleanup of trash, removal of exotics, and planting indigenous (native) plants in new landscape area. The existing property contains City fire and police stations and an adjacent area wetland-mangrove lagoon that provides fish habitat, stormwater runoff retention and treatment. The Florida Department of Environmental Protection (DEP), SFWMD, and USACE permits for construction were issued in 2003.

Key Largo Wastewater Treatment District, Key Largo, FL, 2008-2013

Provided engineering and construction management services for new wastewater district during construction of collection, transmission treatment facilities.

- Operations Manager for utility district: planned, organized, assigned, directed, and reviewed the work of 17 employees engaged in operation and maintenance of the vacuum pump collection system, advanced wastewater treatment plant, deep injection well/backup system, and sludge dewatering/disposal operations; Prepared reports, presentations, conducted workshops, training, scheduling, budgeting, risk management, safety.
- Managed bid/award process and provided construction management for an $18 million advanced wastewater treatment plant and deep injection well/backup system; Reviewed progress of contractors work, change orders, developed punch lists, conducted progress meetings, maintained shop drawings /submittals, record drawings, and RFI files; maintained equipment operation and maintenance manuals, assisted/coordinated in plant start-up and operation.

Industry and Environment, Florida and Texas, 1992-2008, 2013-present

President of engineering firm offering a wide range of civil and environmental engineering services to public- and private-sector clients.

- **Truman Annex Property Owners Association**
  Stormwater drainage plans and new asphalt paving designs for parking areas, including stormwater exfiltration trenches.
- **Key West Golf Club Property Owners Association**
  Design of storm sewer to mitigate drainage problem in condo residences at golf course.
- **Seaside Grocery & Deli Flood Proofing, Key West**
  Developed flood-proofing design, calculations, certifications and documents necessary to comply with Key West FEMA Coordinator Checklist, flood insurance company, and NFIP requirements that reduced flood insurance premiums for property owner.
- **Monroe County Emergency Management, Marathon, FL**
  Provided engineering services for design and preparation of FEMA Pre-Disaster Mitigation (PDM) grant application for a new 20,000 square foot hurricane Category 5 EOC building, resulting in a grant award of $4.2 million. Work included calculations, cost estimates, field survey and engineering assessment of the blueprints and design codes for the existing Marathon Government Center (MGC) used as a makeshift EOC /BOCC Room.
- **American Airlines, 1992-2008 & 2010**
  - Storm water drainage studies, SWPPPs, SPCCs, fuel spill facility response plans, permits, waste treatment designs, fuel spill plans and remediation for maintenance facilities at Miami International Airport (MIA), LAX, AFW, ORD, and JFK International Airports; Nashville, TN, El Paso, TX, San Diego and San Louis Obispo, CA, Tulsa, OK, Kansas City, MO, St. Louis, MO, San Juan, Puerto Rico and Dallas Fort Worth, TX.
  - Industrial waste treatment facilities at the American Airlines maintenance bases at Alliance Airport (AFW) & (DFW) in Fort Worth, Texas and at the base in Tulsa OK.
- **Tinker Air Force Base, Oklahoma City, OK 1992-1995**
  Provided consulting/construction management services to the design/build contractor, NACC, the U.S. Army Corps of Engineers Tulsa District, U.S. Air Force Materiel Command (AFMC), Air Logistics Command (ALC) and USN TACAMO-NAS Patuxent River, MD. For this project he aided in design, construction management, start-up of a groundwater extraction well field, operation of treatment system for removal of aircraft maintenance waste solvents and heavy metals at the Soldier Creek/Building 3001 NPL site. EPA Superfund Project- longest drilled horizontal extraction well system in history for environmental cleanup and ground water remediation.
- **Union Pacific Railroad, Omaha, Nebraska**
  Project Manager for storm water drainage and wastewater treatment facilities and ground water assessments and clean-ups for fuel contaminated Texas Yards in Fort Worth, Palestine, Waco, Mesquite, and San Antonio. San Antonio cleanup addressed jointly groundwater remediation from Kelly Air Force Base. The work included facility SWPPP's, SPCC's, construction management, soil & water sampling and analyses, assessment and remediation reports, facility start-up, operation services & permits.
- **Bell Helicopter-Textron, Fort Worth & Grand Prairie, Texas**
  Project manager for process and waste treatment facilities design, facilities engineering, construction management operations, and hazardous waste management for V-22 Tilt-Rotor Aircraft manufacturing facility– as consultant to KVG Gideon Toal Inc. Fort Worth, TX & Department of Navy, Southern Division, North Charleston SC, Naval Facilities Engineering Command (NAVFACENGCOM). In 2007- Provided facilities engineering assistance to Bell Helicopter-Textron Fort Worth TX for a new 40,000 SQ FT building at BHT #1 involving equipment selection cost-effective payback analysis using US Army Engineering and

Support Center (Huntsville, AL) software ECONPACK version 3.1.2.

- **Marine Corps Logistics Base, Albany, Georgia-** Industrial Waste Treatment Facility Upgrade Construction Phase, Construction Management, Plant Start-up and OPS Training for the design/build contractor, NACC and USN, Southern Division, North Charleston SC, NAVFAC.
- **E-Systems (now Ratheon), Greenville, Texas** Project manager for facilities projects involving wastewater and stormwater collection and treatment of aircraft maintenance, paint stripping and printed circuit board wastes; hazardous waste remediation, contaminated soil groundwater monitoring and treatment; The work included RCRA Part B permits, SWPPP's, & SPCC's, construction management, contamination cleanup, plant start-up, & operation services.

Environmental Research Lab, Institute for Environmental Studies, Heavy Metals Task Force, University of Illinois at Champaign-Urbana
Research assistant for identification and investigation of environmental problems and solutions. Conducted anaerobic filter pilot plant study for removal of heavy metals and organics from Enfield, CT landfill leachate, soil testing from zinc smelter plant site; studies of toxic effects of applying Chicago Sanitary District sludge to farmland. Conducted atomic absorption spectroscopy, gas chromatography, nuclear magnetic resonance studies, sample preparation and wet chemistry analysis.

PUBLICATIONS

Heavy Metal Removal from Sanitary Landfill Leachate by Anaerobic Filter, 32nd Purdue Industrial Wastewater Conference, 1977.

Heavy Metal Removal with Completely Mixed Anaerobic Filter, Water Pollution Control Federation Journal. 1979.

Jet Maintenance Waste Treatment in the Jet Age, Paper presented at Texas Water Pollution Control Association Conference, June 3-5, 1992, Dallas, Texas.

ECO-Diving 101, Dive Travel Magazine, July/August 1997, Santa Cruz, CA.

PROFESSIONAL REGISTRATIONS & ASSOCIATIONS

Florida PE license No. 48504

Professional Engineer in six states—FL, TX, IL, IN, MS & AL

Grade A Water Treatment Plant Operator, Texas

Class A Water Treatment Plant Operator, Illinois

Class 4 Wastewater Treatment Plant Operator, Illinois

American Society of Civil Engineers (ASCE) No. 420707

Cuban American Association of Civil Engineers (CAACA), Miami- Key West-Havana Chapter

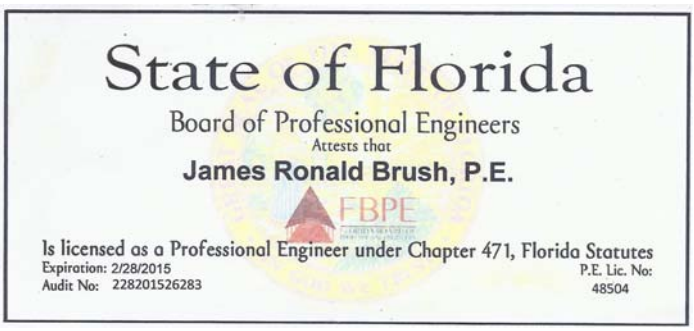
Member, United States Power Squadrons, No. E134585

PADI Certified Dive Master No. 98273

NOAA Team Ocean Volunteer, Florida Keys National Marine Sanctuary, boat operator, 1999-2009

SKILLS AND SPECIALIZED TRAINING

Microsoft, AutoCAD, ESRI GIS ArcView, Primavera Management System Prime Contract; Bentley Water/SewerCAD; Computerized Maintenance System *Cityworks*; familiar with Naval Facilities Engineering Command- Construction Management System (NAVFAC Web CM); USEPA Environmental Management Systems (EMS ISO14001); FEMA Incident Command System Certifications ICS100, ICS200, ICS700 & ICS800.


State of Florida
Board of Professional Engineers
Attests that
James Ronald Brush, P.E.
FBPE
Is licensed as a Professional Engineer under Chapter 471, Florida Statutes
Expiration: 2/28/2015
Audit No: 228201526283
P.E. Lic. No: 48504

APPENDIX F
PROJECT MANAGEMENT CORE MODEL
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Bureau Veritas North America, Inc. – Project Core Model

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