



Aptim Federal Services, LLC
2410 Cherahala Boulevard
Knoxville, Tennessee 37932

January 27, 2021

Mr. Theodore Smith
Program Manager
Reactor Decommissioning Branch (RDB)
Division of Decommissioning, Uranium Recovery and
Waste Programs (DUWP)
Office of Nuclear Material Safety and Safeguards (NMSS)
U.S. Nuclear Regulatory Commission (NRC)
Washington, DC 20555-0001

Subject: Request for NRC Concurrence with U.S. Navy for Transfer of Surface Ship Support Barge Possession to Aptim Federal Services, LLC

Dear Mr. Smith,

Aptim Federal Services, LLC ("Aptim") is requesting U.S. Nuclear Regulatory Commission ("NRC") concurrence with the U.S. Navy's ("Navy") planned transfer of the Surface Ship Support Barge ("SSSB") to Aptim for Dismantlement and Disposal ("D&D"). Aptim will take custody in the Hampton Roads, VA area after which limited characterization will be conducted and tow preparations will be performed. Aptim will maintain SSSB possession throughout transit via ocean-going barge to Alabama Shipyard ("ASY") in Mobile, AL. At ASY, the SSSB will be transferred from barge to land for physical D&D and disposal as described in the SSSB Decommissioning Work Plan ("DWP").

1. Background

The SSSB is a non-powered vessel that was used to support Navy nuclear-powered vessel refueling. The function of the SSSB was to receive, hold and prepare previously used reactor components designated for ship-out or reuse. The SSSB provided the ability to perform maintenance functions similar to those performed in a typical pressurized water reactor spent fuel pool with the exception of long-term spent fuel storage. Remaining radioactivity onboard the SSSB is estimated at approximately 1 Ci of Cobalt 60 and other activated corrosion products.

The Navy and the NRC have developed a notional framework under which NRC will oversee the decommissioning contractor's work in accordance with NRC decommissioning and radiation protection regulations and guidance¹. The Navy has entered into a contract (Contract Number N00024-20-C-4139) with Aptim, a commercial nuclear decommissioning services provider, to perform the SSSB D&D.

As part of the notional framework, NRC is to review Aptim's work plans, procedures and qualifications and, if found satisfactory, recommend that the Navy transfer custody of the SSSB to Aptim. Aptim has prepared a DWP and submitted it to NRC. The DWP is currently under NRC review.

¹ Solicitation No. N0002418R4339, 5 November 2019, Issued by Naval Sea Systems Command (HQ), Attachment J-7 – Framework for Regulation of SSSB Dismantlement and Disposal.



This correspondence is a formal request that NRC issue its recommendation that Aptim take possession of the SSSB in order to initiate tow preparations and perform limited characterization work. The tow from VA to AL will not commence until the NRC completes review of the DWP and provides plan approval.

2. Statement of Purpose of Transfer

The transfer will allow Aptim to initiate the SSSB D&D process by: (1) making tow preparations to support movement of the SSSB in advance of the 2021 hurricane season, and (2) performing limited characterization activities. Aptim would like to commence and complete relocation of the SSSB before the 1 June 2021 start of hurricane season. Upon NRC recommendation, Aptim will assume possession of the SSSB in the Hampton Roads area. It will then be prepared for transport via ocean-going barge to Mobile, AL. In Mobile it will be transferred from ocean-going barge to land at Alabama Shipyard (ASY). In the course of preparing for tow, Aptim will perform holds and ballast tank inspections and will also perform limited characterization (e.g., paint sampling and total and removable contamination measurements).

After the SSSB has been positioned on land, and on approval of the DWP, radioactive material removal and packaging for disposal will commence. Approximately 85% of the SSSB is anticipated to be disposed of as radioactive waste. The remaining 15% will be released for unrestricted use after comprehensive radiological surveys confirm the absence of radioactive materials.

3. General Corporate Information

Aptim Corp. is a U.S. Corporation headquartered in Baton Rouge, LA specializing in engineering, program management, environmental services, disaster recovery, complex facility maintenance and construction services. Aptim's 6,000 employees generate in excess of \$1.2 billion in annual revenues serving clients in Government, Oil, Gas, Chemical, Industrial, Commercial and Power sectors throughout the U.S. and in 12 foreign countries. The SSSB D&D will be performed by Aptim Federal Services, LLC a wholly owned subsidiary of Aptim Government Solutions, LLC which, in turn, is a wholly owned subsidiary of Aptim Corp.

4. Technical Qualifications

Aptim's qualifications to perform this project include individuals qualified by education, training and experience who will implement documented and proven work control and quality assurance programs and processes. The SSSB project management, quality assurance and radiological safety staff have previous similar nuclear D&D experience, most recently highlighted by successful completion of the U.S. Army Corps of Engineers Sturgis MH-1A reactor barge ("Sturgis") D&D project. Aptim planned and performed the \$65 million Sturgis D&D and disposed of the Class A and Class B low-level radioactive waste and mixed low-level waste at the Waste Controls Specialists facility in west Texas. The non-nuclear portion of the Sturgis was released for unrestricted use following extensive radiological clearance surveys. The Sturgis project is comparable to the SSSB in terms of size, scope, complexity and radiological and industrial hazards. As will be required for the SSSB, the Sturgis also required transfer of possession, transport from VA to a dismantlement site alongside the Gulf of Mexico, decontamination, dismantlement and waste disposition.

Although not being implemented for the SSSB project, Aptim has been issued NRC and NRC Agreement State licenses for performing a variety of activities, as listed in Attachment 1. The management and radiation safety organizations authorized to possess and use radioactive materials under those licenses will oversee and perform SSSB D&D.



The proposed organization chart is shown in Attachment 2. Importantly, while the Project Quality Assurance and Radiation Safety Organizations will support and coordinate with the Project Manager to accomplish the SSSB D&D, their organizational independence is maintained via a formal reporting relationship to the Corporate Environmental Safety, Health and Quality organization. Resumes for select members of the project management team including the Project Manager, Site Manager, Contractor Quality System Manager, Corporate Director of Health Physics, Project Certified Health Physicist, Project Technical Manager, and Project Radiation Safety Officer are provided in Attachment 3.

5. Financial Qualifications

The SSSB D&D project is 100% fully funded by the U.S. Naval Sea Systems Command (“NAVSEA”), the project owner, and progress payment milestones have been contractually established. APTIM is financially stable and fully prepared to meet the financial obligations of project performance. APTIM has performed \$292.7M of radiological work as the prime contractor under NRC license and regulation within the past five years.

As is contractually required, Aptim has obtained the commitment of Argo Surety to provide project-specific payment and performance bonds valued at 20% of the project completion price. This security will be effective as of the date Aptim takes possession of the SSSB. Argo Surety is “Treasury Listed” by the U.S. Department of the Treasury with an underwriting limitation in excess of \$89 Billion. A.M. Best Company has assigned Argo Surety an “A” rating with a Financial Size Category of XIV. A copy of the commitment letter is provided as Attachment 4.

6. Other Regulatory Considerations

The SSSB D&D project has been reviewed with Alabama state regulatory agencies and stakeholders including the Alabama Department of Environmental Management, the Alabama Department of Health, Office of Radiation Control, the Office of the Mayor of Mobile, and the Port of Mobile. Aptim has also held, and will continue to hold, meetings with local emergency response organizations and environmental advocacy groups to ensure all interested parties are apprised of the project as it proceeds.

7. Conclusion

Aptim is requesting that NRC make an affirmative recommendation to the U.S. Navy that Aptim has the appropriate technical and financial qualifications to assume possession of the SSSB in Hampton Roads, VA for the near-term purpose of making preparations for ocean transit to Mobile, AL before the 2021 hurricane season, to perform inspections and characterization of SSSB holds and ballast tanks, to relocate the SSSB from Hampton Roads, VA area to Mobile, AL and to move it from the ocean-going barge into position for D&D at ASY. Physical D&D of the SSSB will not commence until the DWP has received NRC approval.

Sincerely,

A handwritten signature in black ink that reads 'Bruce A. Fox'.

Bruce A. Fox, PMP

APTIM Project Manager

E-mail: Bruce.Fox@aptim.com

Telephone: 208-901-2142 (mobile)



cc: Steve Moran (APTIM)
Rob Biolchini (APTIM)
Art Palmer (APTIM)
Rick Greene (APTIM)
Mark Somerville (APTIM)
Randy McBride (APTIM)
Michael Carr (APTIM)
Jerry Low (NAVSEA)
Raymond Duff (NAVSEA)

Encl.

ATTACHMENT 1

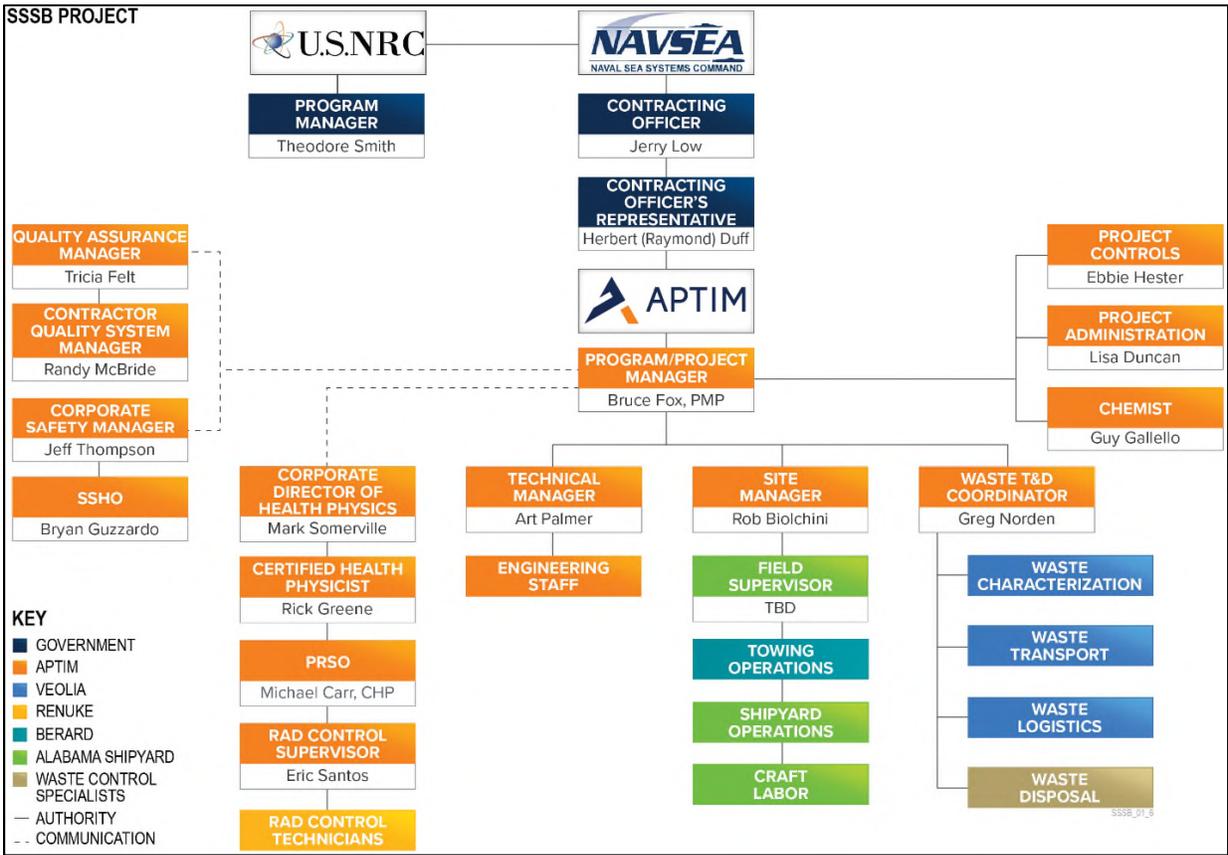
APTIM RADIOACTIVE MATERIAL LICENSES

Agency/License Number	Possession Limits			Authorized use
	Byproduct, Source or Special Nuclear Material	Chemical/ Physical Form	Maximum amount licensee may possess at any one time under this license	
US NRC 20-31340-01	Byproduct Material atomic numbers 1-92 excluding radium	Any	Total not to exceed 370 gigabecquerels (10 curies)	For receipt, storage, use and/or possession incident to any activities as follows: (1) Decontamination of facilities, equipment or containers; (2) Solidification and treatment of wastes; (3) Packaging for transport; (4) Any activity related to site characterization; and (5) Transport in packages or containers approved for use under the provisions of 10 CFR 71; for transfer to licensees authorized to receive materials, in accordance with the terms and conditions of licenses issued by the NRC or Agreement State.
	Radium-226	Any	Total not to exceed 74 gigabecquerels (2 curies)	
	Any byproduct material with atomic numbers 93 and above	Any	Total not to exceed 0.37 gigabecquerels (10 millicuries)	
	Source Material	Any	Total not to exceed 7 kilograms.	
	Special Nuclear Material	Any	1 gram uranium-235, 0.5 grams plutonium, or 1 gram uranium-233, or any combination of those provided the sum of the ratios does not exceed unity.	
New Jersey Department of Environmental Protection 662880-RAD17002	Any byproduct material with atomic number 1 – 92.	Any	1 curie	Authorized use: For receipt, storage, use and/or possession incident to any activities as follows: (1) Decontamination of facilities, equipment or containers; (2) Solidification and treatment of wastes (3) Packaging for transport (4) Any activity related to site characterization; and (5) Transport in packages or containers approved for use under the provisions of N.J.A.C. 7:28-61.1 (10 CFR 71), for transfer to licensees authorized to receive materials, in accordance with the terms and conditions of licenses issued by the NRC or Agreement State.
	Any byproduct material with atomic number >92	Any	100 millicuries	

Agency/License Number	Possession Limits			Authorized use
	Byproduct, Source or Special Nuclear Material	Chemical/ Physical Form	Maximum amount licensee may possess at any one time under this license	
California Dept. of Health Services 7889-07	Any radionuclide with atomic numbers 1 through 95	Any	Total not to exceed 3.7 gigabecquerels (100 millicuries)	To be used for processing, storing at temporary job sites, packaging, repackaging and transportation of radioactive materials incidental to surface decontamination of structures and equipment, and the remediation of contaminated soils, soil-like materials, structures and equipment at sites owned by or operated under the authority of various clients. Other authorized activities include conducting field surveys, sample analyses, and characterization of soil, debris, and building materials.
Kansas Department of Health and Environment 34-C984	Any radioactive material	Unsealed: Any chemical or physical form	100 microcuries total	Characterization, decontamination, decommissioning, and subsequent disposal of contaminated soils and materials in accordance with a work plan pre-approved by the KDHE Radiation Control Program.
	Any radioactive material	Sealed source(s): Any sealed source not otherwise specified on this license manufactured, labeled, packaged and distributed in accordance with a specific license issued by the US NRC, and Agreement State of a licensing state.	100 microcuries total	To be used for calibration, transmission, reference and quality control.

ATTACHMENT 2

SSSB PROJECT ORGANIZATION CHART



ATTACHMENT 3

SELECT APTIM PROJECT MANAGEMENT RESUMES

SSSB D&D Organization Position: Project Manager

NAME: Bruce Fox, PMP

Professional Qualifications Summary

Mr. Fox has over 20 years of experience managing Federal construction, radiological, and environmental projects. He has excellent working knowledge of federal regulations and standards under U.S. Army Corps of Engineers (USACE) and U.S. Department of Energy (US DOE), Nuclear Regulatory Agency (NRC), and NQA-1. His focus on customer service, health and safety, doing the job right the first time, team work, and continuous improvement has provided added value to his clients as reflected from numerous client appreciation letters and awards. He plans, directs, and manages construction programs, ensuring project revenue and schedule goals are accomplished within prescribed owner requirements and funding parameters. He is responsible for overall project execution including initial planning, design/build coordination, long lead procurement, subcontractor management, project staffing, materials logistics planning and oversight, as well as ensuring adequate internal controls and review procedures for cost and schedule are followed. Mr. Fox has experience managing programs consisting of multiple teams, construction managers, site superintendents, and subcontractors during execution of several concurrent projects.

Relevant Experience

Aptim Federal Services, LLC, Project Manager, April 2017 – Present

Project/Program Manager, Welsbach General/Gas Mantle (WGGM) Superfund Site, Gloucester City, NJ (04/2017 – Present)

Managed all aspects of the WGGM Superfund site for the USACE, which has a funding capacity provided by the EPA of \$50M over 5 years. The project consists of remediation of satellite excavations within an industrialized area of Gloucester City, NJ as well as inside the busiest shipping port on the East Coast (Gloucester Marine Terminal (GMT), containing residual radioactive contamination left over from the old Welsbach & General Gas Mantle production facilities. Remediation involves removal of contaminated wastes, achieving clean up goals in accordance with site plans, specifications, and MARRISM guidelines, then importing and backfilling with clean soil meeting acceptance criteria while restoring the areas to their pre-remediated lines and grades. Waste is manifested and shipped via gondola railcar to a permitted disposal facility. Water is managed through collection and treatment through an onsite water treatment facility, then released through a permitted outfall meeting NJDEP release requirements. Managed all aspects of safe work execution, cost and schedule control, quality performance, project staffing, and client reporting. Successfully packaged, loaded, and shipped 19,445 tons of LLRW to date, all without incident, on schedule, and within budget.

22 years

of Project Management experience

Education

- ▶ BS, Construction Management

Highlights

- ▶ Certified DOE/USACE Radiological Worker II with 14 years of project management directly related to managing radiological projects under NRC and/or NQA-1

Registrations/ Certifications

- ▶ Project Management Professional (PMP), Nationwide
- ▶ DOE/USACE Radiological Worker II

Training

- ▶ USACE Contractor Quality Control (CQC), 2006
- ▶ 30-hour OSHA Safety Training, 2003; Refresher, 2004
- ▶ OSHA Excavation Competent Person Training, 2001
- ▶ U.S. Department of Transportation (DOT) Training 49 CFR Part 172 subpart H, Modules 1-3, 2000
- ▶ Supervisor/Manager Health and Safety Training for HAZWOPER, 1993; Current Refresher, 2021

ESI, Project/Program Manager, June 2015 – April 2017**Senior Project Manager, Performix Nutrition Systems, Rupert, Idaho (06/2015 – 04/2017)**

Managed all aspects of this design/build manufacturing facility. Project included site work on a challenging location with high groundwater, utilities, procuring, and erecting five pre-engineered metal buildings with full mechanical, electrical, and plumbing provisions, finishes, foundations, and concrete containment pads for owner's storage tanks, and processing equipment, site landscaping, and paving.

Project Manager, Various Department of Defense Construction, Afghanistan and Bahrain (03/2008 – 04/2014)

Project Manager for multiple vertical and runway FFP projects for USACE, Air Force, and Navy clients in Afghanistan. Also managed vertical base housing and dining facility construction in Bahrain for the Navy under a USACE FFP contract.

APTIM, Project Manager, April 1999 – March 2008**Project Manager, Formerly Utilized Sites Remedial Action Program (FUSRAP), St. Louis Downtown Site and St. Louis Airport Site, St. Louis, MO (04/1999 – 03/2008)**

Responsible for project management at both The St. Louis Downtown Site and the St. Louis Airport site projects with an estimated value of \$400 million. The projects started in 1998 and received approximately \$26 million in funding per year. The St. Louis Downtown Site is located on the bank of the Mississippi river, within the Mallinckrodt Chemical Company facility and included engineering and construction necessary for remediation of more than 150,000 cubic yards of low-level radioactive soil at over 13 sites. The project consisted of multiple complex engineering and execution challenges due to the proximity of buildings, utilities, roadways, and busy rail traffic. The St. Louis Airport Site was the disposal area for waste material from the Downtown Site during the Manhattan Project era of uranium processing. The project includes the remediation of 600,000 cubic yards of low-level radioactive contamination in and around the St Louis Airport area. Completed on time, within budget, and safely with no OSHA recordables on more than 1 million manhours worked.

Construction Manager, Weldon Springs Site Remedial Action Program (WSSRAP), St. Charles, MO (11/1996 – 12/1999)

Responsible for all field execution of US DOE projects within the quarry/vicinity properties project team. Projects consisted of coordinating all field aspects of procurement, quality, engineering, compliance, and construction functions during excavation of contaminated soils and other materials from various properties adjacent to, and near the main US DOE WSSRAP site. Also responsible for managing all aspects of plant design, construction, and operations for a \$5.7 million full scale production facility for cement stabilization of radioactive raffinate sludges. The Chemical Stabilization and Solidification (CSS) facility continuously mixed radioactive waste sludges with a binder consisting of a blended ratio of fly ash and portland cement, producing a grout product meeting regulatory compliance requirement for permanent contaminant stabilization for long term disposal in an on-site disposal cell. Also supervised direct-hire union craft disciplines including earthwork, concrete, structural steel, mechanical, electrical, instrumentation, computer control room, as well as respective plant operations personnel.

SSSB D&D Organization Position: Site Manager

NAME: Robert Biolchini, PE

Professional Qualifications Summary

Mr. Biolchini is a Registered PE with nearly 35 years of process engineering experience and site management for radiological, decommissioning and disposal (D&D), and other hazardous environmental projects. He has led the commissioning and start-up of complex, full-scale plants to process radioactive material, mixed wastes, and biological and hazardous materials. He has significant experience in all project phases – from original concept development and proof of concept through operations – and has been involved in first-of-a-kind applications, including developing prototypes and test programs to commercialize new processes. Mr. Biolchini managed site activities for the D&D of the Sturgis MH-1A nuclear barge. Following the Fukushima Daiichi nuclear incident, Mr. Biolchini oversaw a fast-track design effort to develop a water treatment system to remove multiple radionuclides from highly contaminated water. He helped engineer effective shielding and remote radiation detection systems and design modifications to an existing mobile bridge crane, ultimately resulting in a four-month turnaround time for the critical NQA-1 system.

Relevant Experience

Aptim Federal Services, LLC, Site Manager, July 1996 – Present

Site Manager, Surface Ship Support Barge (SSSB) D&D, Mobile, AL (06/2020 – Present)

Site Manager for upcoming SSSB D&D project. Currently developing work plans and assisting with procurement activities. Plan to mobilize as Site Manager for full scale D&D operations in spring 2021.

Engineering Manager, Lawrence Livermore National Laboratory Building 280 Reactor Removal Project, CA (05/2020 – Present)

Engineering Manager for USACE's project to remove the Livermore Pool Type Reactor (LPTR). Developed work plans and supervised the Pre-work Investigation for removal of the LPTR and associated equipment.

Engineering Manager, Fort Greely Building 606 Utility Separation Project, AK (07/2019 – 12/2020)

This work was completed in preparation for USACE's SM-1A reactor Decommissioning and Demolition (D&D) project. The separation of utilities will allow the adjoining Central Heating Power Plant to continue operating during the SM-1A D&D project. Mr. Biolchini led a group of local firms to develop a work package including electrical, mechanical, and civil/structural drawings and specifications.

Site Manager, D&D, Sturgis MH-1A Barge, Galveston, TX (07/2014 – 10/2018)

Site manager for the \$70M decommissioning project for the Sturgis nuclear reactor barge for USACE. The Sturgis was a 1945-vintage Liberty Ship that was fitted with a 10 MW nuclear power plant in the

35 years

of engineering and management experience

Education

- ▶ BS, Chemical Engineering

Highlights

- ▶ 30 years of experience leading design teams and solving complex remediation challenges on high-hazard and high-rad projects, including the design, fabrication, on-site testing, commissioning, and operation of systems to remediate radioactive and mixed-waste

Registrations/ Certifications

- ▶ Professional Engineer (PE), Chemical, #062-040956, Illinois
- ▶ (PE), Chemical, #50914, Washington

Training

- ▶ Hazardous Waste Operations, Beaumont TX, 1993

early 1960s and was used to power the Panama Canal zone for 10 years. In 1978 it was retired from active service, de-fueled, and placed in the James River Reserve Fleet. The Sturgis was towed to Galveston in 2015 for removal of residual radioactive material and final clearance prior to disposal at a shipbreaking facility. As site manager, developed plans for installation of ship-board and dock-side infrastructure as well as decommissioning. Provided daily direction for the decommissioning for over three years, with a typical crew of 25 workers. Safely removed more than 1,000 tons of radioactive waste and recycled 270 tons of lead material. With all radioactive material removed, the Sturgis was towed to a conventional shipbreaker in September 2018 for demolition and disposal as scrap metal.

Project Engineer, Toshiba Corp., SARRY Water Treatment System, Fukushima, Japan (2011)

Oversaw the design, installation, and start-up of a proprietary simplified active water retrieve and recovery system (SARRY) to remove cesium and other highly radioactive contaminants from water in basement structures of the damaged Fukushima Daiichi nuclear power station. The treatment system was designed to remove and contain 28 million Ci of radioactive Cesium and Strontium from damaged reactor cooling water using ion-specific resin. The skid-mounted process was used in a high radiation field and operated remotely. The SARRY was used to help cool the nuclear reactors before being filtered again that enabled continued reactor cooling and reduced the accumulation of radioactive wastewater. The design team met an aggressive project schedule, from concept to full-scale operation in less than 5 months. Received a certificate of appreciation from Toshiba Corp.

Site Engineering Manager, DOE Paducah Gaseous Diffusion Plant, Building C400 Interim Remedial Action Groundwater Treatment System , Paducah, KY (2009 – 2010)

Provided the design, fabrication, installation, and operation of soil vapor and groundwater treatment system. Scope of work included a 90 gpm contaminated groundwater treatment system. The contaminants of concern were trichloroethylene, dichloroethylene and vinyl chloride breakdown products, and Technetium-99. The system was automated to allow unmanned 24/7 operation with safe shutdown interlocks and call-out notification. Supervised seven engineers and designers during design phase and an operations crew of 12 people.

Engineering Manager, Evendale Transfer Station, OH (2005 – 2007)

Oversaw an engineering team responsible for all aspects of the design of a 1,500-ton/day solid waste transfer facility, including preparation of civil, landscaping, structural, architectural, mechanical, electrical, and plumbing drawings and specifications. The project received an Award of Excellence in Merit Shop Construction from Associated Builders & Contractors, Inc.

Lead Engineer and Commissioning Manager, Fernald Waste Pits Remedial Action Project (WPRAP), Hamilton, OH (1998 – 2002)

Managed the specification, procurement, and system integration of indirect rotary dryers, including feed and product material handling systems. Served as commissioning manager and led team of 10 engineers and construction personnel during installation and startup of thermal drying system and accompanying wastewater treatment system designed to treat low-level radioactive sludge contaminated with Uranium and total suspended solids.

SSSB D&D Organization Position: Technical Manager

NAME: Arthur Palmer, PMP, CHP, CSP

Professional Qualifications Summary

Mr. Palmer is a Project Management Professional, Certified Health Physicist and Certified Safety Professional with 45 years of military and commercial nuclear operations, decommissioning and waste management experience. He was initially trained in the U.S. Naval Nuclear Power program. From 1980 to 1991 he held a series of positions of increasing responsibility as a technician, supervisor, engineer and department manager at Three Mile Island Unit I power plant during TMI-II post-accident modifications, and Unit I restart. At TMI-I he was also qualified to perform evaluations per 10 CFR 50.59. Over the past 30 years, he has held a variety of supervisory, management and consultant roles in facility operations, decommissioning and radioactive waste management for US Ecology, Envirocare of Utah, and EnergySolutions as well as other companies engaged in nuclear facility operations and decommissioning. Some of the projects in which he held a significant role include: US Ecology Beatty Site Closure; Portland General Electric Trojan Reactor Vessel and Internals Removal (RVAIR); construction and commissioning of the Envirocare of Utah (now EnergySolutions) Containerized Waste Facility in Clive Utah, closure of the Breckenridge, MI disposal site, Fermi I reactor segmentation, termination of the Mallinckrodt downtown St. Louis NRC Source Material License; and, U.S. Army Corps of Engineers Sturgis MH-1A reactor decommissioning.

Relevant Experience

Aptim Federal Services, LLC, Health Physics and Decommissioning Subject Matter Expert, July 2019 – Present

Provides expert technical support to APTIM's nuclear reactor and facility D&D activities including characterization, remediation and radiological final status surveys. Performs technical reviews of programs, plans and procedures for decommissioning activities. Develops technical solutions for projects throughout the U.S. with particular emphasis on government and military nuclear facilities.

SNC-Lavalin/Atkins/EnergySolutions, Director Radiological Support Services, September 2008 – July 2019

Provided Program Level Management Oversight and Direction for various project, including those listed below.

Project Manager, La Crosse Boiling Water Reactor License Termination Plan, Genoa, WI (05/2014 – 04/2016)

Managed the technical approach and NRC interface for waste disposal for remaining components containing significant levels of alpha activity and developed the license termination submittal

45 years

**of nuclear operations
waste management and
D&D experience**

Education

- ▶ MBA, Operations, 1991
- ▶ BS, Physics, 1987
- ▶ AGS, Physics/Business Administration, 1980

Highlights

- ▶ Industry expert with 45 years of experience safely managing radioactive materials and nuclear facility operations and decommissioning activities, including Navy Nuclear Power Program, Three Mile Island Restart, and 30 years of a full spectrum of D&D projects that include power plant and ship system interfaces

Registrations/ Certifications

- ▶ PMI Project Management Professional (PMP)
- ▶ Certified Safety Professional (CSP)
- ▶ Certified Health Physicist (CHP)
- ▶ UK Chartered Radiation Protection Professional (CRadP)
- ▶ National Registry of Radiation Protection Technologists (NRRPT)

Training

- ▶ University of Idaho Human Performance Practitioner, 2012
- ▶ Numerous Short Course Training Programs: e.g., RESRAD, MARSSIM, Gamma Spectroscopy, etc.

that consisted of site characterization, development of the derived concentration guideline limits (DCGLs) and technical development of site categorization and classification.

Radiological Protection Supervisor and Alternate RSO, STURGIS MH-1A, Galveston, TX (04/2015 – 10/2018)

As a subcontractor to APTIM for the decommissioning of a floating barge-based reactor, Mr. Palmer led development and implementation of D&D procedures for radiological survey and monitoring protocols (e.g., Reactor Pressure Vessel [RPV], steam generator, pressurizer, reactor coolant system and primary shield tank removal and MARSAME survey program development). Assessed STURGIS systems to identify contaminated components and evaluate survey needs for hull bottom fuel tanks. Developed, implemented, and oversaw work activities for the RPV and PST removal ALARA plan, minimizing personnel radiation exposures by evaluating more than 20 exposure scenarios to adjusted processes. He also deployed and trained project personnel on Mirion remote personnel monitoring system to reduce dose and prevent individuals exceeding project dose limits. Successfully reduced dose incurred from original estimate of 15.6 person-rem to 4.4-person rem with no personnel contamination events or uptakes of radioactive material.

Radiological Support Program Manager for EnergySolutions/Atkins Projects including: Humboldt Bay D&D, Eureka, CA (05/2014 – 04/2016)

Provide senior radiological oversight and support of EnergySolutions reactor vessel internals segmentation project. Maintained radiation exposures within regulatory limits and ALARA with no contamination events/uptakes of radioactive material.

Mallinckrodt Pharmaceuticals, St Louis, MO (04/2012 – 06/2015)

Completed implementation of Decommissioning Plan and Final Status Surveys leading to the termination of the Mallinckrodt NRC Source materials license. Directed technical activities to complete FSSs in accordance with the NRC decommissioning plan. Met with NRC Headquarters to resolve technical issues associated with DCGL development and FSS implementation and assigned and tracked corrective actions. NRC Source Material License was successfully terminated.

Breckenridge Waste Disposal Site Remediation, Breckenridge, MI (09/2009 – 03/2012)

Managed work control process to decommission and remediate a legacy waste disposal site. Authored plans and programs and completed the FSS in accordance with the facility decommissioning plan. The site was successfully released from NRC control after meeting decommissioning plan criteria.

SEFOR, Fayetteville, AK (11/2009 – 11/2011)

Provided radiological engineering and analysis for SEFOR reactor and site characterization and initial phase decommissioning. Developed complete characterization of facility for waste classification and disposal.

Zion Decommissioning Project, Zion, IL (09/2010 – 08/2014)

Provided offsite support for the characterization and Final Status Survey (FFS) Plan for the Independent Spent Fuel Storage Facility site, technical support for reactor internals segmentation, classification and packaging for disposal with particular emphasis on identifications, and removal of Greater than Class C waste. Performed audits and assessments of decommissioning operations, waste management and radiological controls.

SSSB D&D Organization Position: Corporate Director of Health Physics

NAME: Mark Somerville, CHP

Professional Qualifications

Dr. Somerville has 40+ years of professional level health physics experience for radiological projects, including coordination with NRC and license renewals, applications, and amendments. He has served on project Safety Review Committees for 25 years at Diablo Canyon and Humboldt Bay Power Plants and is a qualified trainer in the development and implementation of health physics and RAD protection training courses. He is an expert at implementing the tenets of 10CFR50 appendix B Assurance NRC Criteria as well as NQA-1 Consensus Standards. Dr. Somerville manages all aspects of technical programs for instrumentation, dosimetry, Radiological Emergency Response, ALARA programs, and regulatory compliance.

Relevant Experience

Aptim Federal Services, LLC, Health Physics Manager, July 2017 – Present

NRC Compliance/Radiological Safety Director, Naval Station Treasure Island (NSTI) and Hunters Point Naval Station (HPNS), San Francisco, CA (05/2011 – Present)

Leads the California Radioactive Materials/Service Provider License effort and to enhance relationships with the State Regulators. Manages and directs the re-formatting and resubmission of the NRC service provider license and oversees all radiological work performance. Provides oversight of data collection, data quality, and data compliance. Works with the State of California on regulatory jurisdictional issues at HPNS and is engaged with stakeholder groups and all local, state, and federal regulators.

Reformulated a new approach to building and debris clearance, radiation safety, staffing, and the technical approach at NSTI that was written and amended to the California license.

Health Physicist/LCM/Radiological Safety Director; USACE Welsbach General/Gas Mantle Superfund Site, Maywood Chemical Superfund Site, and St. Louis FUSRAP Sites; Gloucester City, Camden, and Maywood, NJ and St. Louis, MO (05/2011 – Present)

Provides technical and regulatory oversight, including staffing, laboratory oversight, performance and regulatory reviews, licensing, and interface with the clients at each project site. Welsbach is unique as it includes a New Jersey state certified radiological laboratory and specifically tailored procedures to meet the health and safety objectives of the EPA and the USACE. Responsible for implementing the radiation safety program for providing safe radiological cleanup in areas occupied by residential and commercial residents.

40+ years

of experience in Health Physics

Education

- ▶ PhD, Radiological Science, 2001
- ▶ MS, Radiation Physics, 1984)
- ▶ BS, Psychology, 1975

Highlights

- ▶ Radiological and nuclear Industry expert backed by 40 years of experience with D&D projects, radiological safety, and regulatory compliance.

Registrations/ Certifications

- ▶ Certified Health Physicist (CHP)
- ▶ Registered Environmental Assessor

Training

- ▶ RESRAD Training, American Board of Health Physics, 2016
- ▶ Risk Communication and Stakeholder Engagement Training, Dade-Moeller, 2011

License Compliance Advisor, USACE Sturgis MH-1A, Galveston, TX (05/2015 – 12/2018)

Provided expertise, guidance, and support to support USACE and the APTIM team in maintaining regulatory compliance with the Army Reactor Office (ARO), Texas State Department of Health Services (an NRC Agreement State) and NRC requirements.

LCM, Humboldt Bay Decommissioning, Eureka, CA (07/2012 – 07/2018)

Performs radiological oversight, including the 10-year re-licensing of APTIM's NRC service providers license (valid through 2035). He performs screening of California Polytechnic State University for NRC license requirements and development of compliant Broad Scope "B" licensed program, including all procedures for State of California license. Served as a Member of the Humboldt Bay Nuclear Safety Oversight Committee. Worked in conjunction with Adele Domingue, the proposed Cost Control and Compliance Officer, to contribute to the project being awarded the ENR California's 2019 Regional Best Projects award.

LCM, Diablo Canyon Power Plant and Humboldt Bay Power Plant, San Luis Obispo, CA and Humboldt Bay, CA (09/1987 – 10/2011)

Provided regulatory interface for radiation protection compliance and performed 50.59 screenings under 10CFR20. Interfaced with the NRC during RAD program inspections, managed database and regulatory affairs groups, and performed 50/59 reviews. Developed all procedures and managed instrumentation, outage response, emergency response, dose controls, radiological environmental programs, dosimetry, radioactive waste, and training for Diablo Canyon's two-unit pressurized water reactor site. Key member of the radiological emergency response program responsible for quantifying potential doses to workers and members of the public in the event of a radiological emergency. This role required knowledge of radioactive material atmospheric transport theory and effective interface with the local governments. Provided training of state and county responders including fire, state, and local police personnel. Diablo Canyon served as the first nuclear power plant to implement the new NEI 07-07, Industry Ground Water Protection Initiative program that was developed by Dr. Somerville. Provided radiological and technical assistance for the removal and replacement of eight steam generators and two reactor head replacements with exceptional dose and contamination performance. Managed and directed the activities of the dosimetry processing laboratory. During his time at Diablo Canyon, the plant set two dose and personnel contamination records for steam generator replacement, received zero notices of violation and received No. 1 rankings from INPO and Systematic Assessment of Licensing Performance (SALP). Served as an active member of the Nuclear Safety Oversight Committee. Dr. Somerville developed and implemented numerous new and updated procedures, including changes to 10CFR20, NVLAP certified dosimetry processing program under ANSI N13.11, NEI-0707 groundwater initiative, modernization of the Radiological Environmental Monitoring Program, and guidance for alpha monitoring in accordance with the EPRI/NEI.

SSSB D&D Organization Position: Project Certified Health Physicist

NAME: Richard Greene, CHP

Professional Qualifications Summary

Mr. Greene is a certified health physicist with experience in health physics, safety, and compliance activities with emphasis on program management, operational health physics, decommissioning and program assessments. His responsibilities have included the performance of radiation protection program assessments, radiological site investigations, development of MARSSIM / MARSAME final status survey plans and final status survey reports, radiological decontamination and decommissioning (D&D) and remediation oversight, and radiation safety audits. He has written radiation protection plans for numerous types of facilities/projects including laboratories, pharmaceutical research, and wastewater treatment facilities, and radiological surveys and sampling, remediation, and D&D projects involving radioactive, hazardous, and mixed waste materials. Mr. Greene has been responsible for obtaining radioactive materials licenses for numerous facilities including several laboratories and treatability testing facilities and has assisted clients with regulatory negotiations. He has served as the Radiation Safety Officer (RSO) on licenses including radioanalytical/mixed waste and treatability testing laboratories, service provider licenses, and D&D licenses. He has prepared and presented training in many areas including radiation protection, radiation detection and measurement, and laboratory safety.

Relevant Experience

Aptim Federal Services, LLC, Manager, Health Physics Technical Support, 2010 - Present

Responsible for management of senior health physics and certified health physics staff. He serves as the Manager of Health Physics Technical Support as part of the Radiological Safety Group. Duties include coordinating activities of health physics staff in meeting technical needs of projects, conducting radiation safety program audits, and providing technical support and resources for projects involving radiation hazards. Serves as the Radiation Safety Officer for the APTIM Kansas Radioactive Materials License.

Naval Sea Systems Command (NAVSEA), Surface Ship Support Barge (SSSB) Dismantlement and Disposal, Mobile, AL (06/2020 – Present)

Project CHP for the D&D of the SSSB. The project entails engineering and regulatory planning to support the first-of-kind inter-agency agreement between NAVSEA and the Nuclear Regulatory Commission (NRC); relocating the SSSB from Newport News, VA to Alabama Shipyard in Mobile, AL; dismantlement of the SSSB; package, transport, and disposition of the entire vessel and contents; and regulatory closeout with NAVSEA and the NRC. Mr. Greene participated in pre-award and post-award meetings with stakeholders in Mobile and Montgomery, Alabama. Provided oversight of preparation of project planning

42 years

of management and oversight of radiation protection programs

Education

- ▶ BA, Physics / Health Physics, 1978

Highlights

- ▶ 42 years of health physics experience including management of radiation safety programs for NRC licensed facilities

Registrations/ Certifications

- ▶ Certification Health Physicist

Training

- ▶ MARSAME Methodology, 2014
- ▶ RS-700 Mobile Radiation Monitoring and Mapping – Training & Operations, 2014
- ▶ Naturally Occurring Radioactive Materials (NORM) and Technologically Enhanced NORM (TENORM), 2009
- ▶ Implementing the MARSSIM Approach for Design and Conduct of Radiological Surveys, 2003
- ▶ Radioactive Waste Packaging, Transportation, and Disposal, 2004
- ▶ 40-hour Health and Safety Training
- ▶ Tritium Safe Handling Course, 1985

documents including the Decommissioning Work Plan, Radiation Protection Plan, Baseline Survey Plan, Environmental Monitoring Plan, Materials Categorization, Survey and Release Plan, and Final Status Survey Plan. Mr. Greene will provide oversight of the SSSB radiation protection program.

Clean Harbors Environmental Services, Clean Harbors Deer Trail, LLC, Deer Trail, CO (03/2020 – 05/2020)

Prepared annual report for submittal to Colorado Department of Public Health and Environment in support of Radioactive Materials License 1102-01. The report provided details pertaining to environmental and occupational monitoring, disposal activities, anticipated activities for the next year, and an evaluation of the decommissioning warranty and funding plan. Dose and risk to members of the general public from radionuclide emissions to air was calculated using the EPA CAP-88 computer model.

US Navy, Various Contracts, CA (2019 – Present)

Provided technical oversight and review of various D&D and remediation projects, primarily in the San Francisco Bay Area (Hunters Point Naval Shipyard) and San Diego (Naval Outlying Landing Field, Naval Air Station North Island) as Project CHP. Provided input and review of technical work documents and final status survey plans and reports. Served as radiological subject matter expert in meetings with regulatory agencies and stakeholders. Performed radiation safety program audits.

USACE, Huntsville WERS, STURGIS D&D Activities, Galveston, TX (03/2014 – 03/2019)

Project CHP and alternate RSO for the decommissioning of the STURGIS Barge. Responsible for overall oversight of the Radiation Protection Program (RPP). This included conducting reviews and audits of the implementation of the RPP. Responsible for providing guidance to the Project Radiation Safety Officer (PRSO) and Site Safety and Health Officer (SSHO), as required. Reviewed all Technical Work Documents and Radiation Work Permits (RWP) and worked with the PRSO to oversee work plans and procedures for matters related to radiation protection. Provided technical direction and oversight for the MARSAME surveys of the remaining vessel and for the final status surveys of the dock and pier.

Storage Yard Site, Raytheon Company, Wichita, KS (2009 - 2017)

Provided support and oversight for the disposal pit excavation, the radiological site investigation and the hot spot excavation. Prepared the Radiation Protection Plan and the Survey Plan and trained field personnel. Provided oversight and review of field survey and excavation activities.

Hawker Beechcraft Corporation, Wichita, KS (09/2016 – 12/2016)

Provided support and oversight for the survey and remediation of the former Beech Aircraft instrument laboratory. Prepared and reviewed survey plan and report, radiation protection plan, and work plan for the removal of contaminated pipe. Performed decontamination activities and reviewed report.

Aptuit, Inc., Kansas City, MO (2004 – 2014)

Provided technical support including preparation of survey and sampling plans, license support, and training. Provided oversight for survey and decommissioning activities including preparation of a decommissioning funding plan. Prepared the Decommissioning Plan for unrestricted release and termination of the NRC license. Provided oversight for decommissioning activities, represented Aptuit in negotiations with the NRC, and prepared documentation for submittal to NRC that resulted in successful termination of the NRC license.

CB&I (Former APTIM Company) Technology Development Laboratory (TDL), Knoxville, TN (01/2014 – 12/2015)

Technical lead for the decommissioning of the TDL. Prepared decommissioning plans and reports and interfaced with Tennessee Division of Radiological Health on decommissioning issues. Decommissioning resulted in the termination of the radioactive materials license and subsequent demolition of the building.

SSSB D&D Organization Position: Project Radiation Safety Officer

NAME: Michael Carr, CHP

Professional Qualifications Summary

Mr. Carr is a Certified Health Physicist with over 30 years of applied health physics experience supporting radiological and nuclear projects. Twenty-five of those years were at the project management and supervision level during decontamination and decommissioning (D&D) projects including emergency response (e.g., steel mill source melt incidents). His background and knowledge include providing support for the U.S. Department of Energy (DOE), U.S. Department of Defense (DOD), U.S. Army Corps of Engineers (USACE), and commercial projects.

Mr. Carr has managed and supervised project personnel and subcontractors in the field for projects valued up to \$17M plus. Such projects have included site characterizations, facility decontamination, and the final status surveys of facilities and the environment for U.S. Nuclear Regulatory Commission (NRC) and agreement state license terminations. He has vast experience in developing technical work documents, procedures, comprehensive work plans, and reports to ensure compliance with federal and state regulations for Radiation Protection and Environmental Operations.

Mr. Carr has also provided technical support for D&D projects including soil remediation, sample collection and analysis, waste characterization, waste packaging and management, laboratory operations, source handling, shielding calculations, As Low As Reasonably Achievable (ALARA) controls, and personnel monitoring. He is proficient in the use of radiological survey instrumentation including gamma spectroscopy systems and general field instrumentation.

Relevant Experience

Aptim Technical Services, LLC, Certified Health Physicist, Knoxville, Tennessee, July 2020 – Present

Responsibilities include providing applied health physics support to client projects. Primary focus includes Radiation Protection Program and Plan development and the field implementation and oversight of Programs and Plans to ensure the health and safety of project staff, public and the environment. Provides technical support for survey design and environmental monitoring to ensure regulatory compliance. Current assignments include Lawrence Livermore National Lab (LLNL) B-280 and SSSB support. For the LLNL project, Mr. Carr is the Radiation Safety Officer responsible for project plan development and field implementation and compliance.

30 years

of radiological and nuclear safety experience

Education

- ▶ BS, Chemical Engineering, Clarkson University, Potsdam, New York, 1989
- ▶ Graduate Studies / Courses, Environmental Engineering, Rennsalaer Polytechnic Institute, Troy, New York

Highlights

- ▶ 31 years of experience developing technical work documents, procedures, and comprehensive work plans for facility D&D, site characterization, and the final status surveys of facilities and the environment for NRC and agreement state license terminations.

Registrations/ Certifications

- ▶ Certified Health Physicist (CHP), 1997, Nationwide, Active
- ▶ American Board of Health Physics

Training

- ▶ Advanced Radioactive Material Shipper Training (DOT), Oak Ridge, TN 2020
- ▶ IATA: Transportation of Radioactive Materials by Air, Oak Ridge, TN 2019
- ▶ Multi-Agency Radiation Survey and Site Investigation Manual (MARSSIM), ORAU, 1998
- ▶ Multi-Agency Survey and Assessment of Materials and Equipment (MARSAME), ORAU, 2015

Atkins, Nuclear Secured, Radiation Safety Officer / Certified Health Physicist, January 2015 – July 2020

Radiation Safety/Design Advisor, STURGIS MH-1A, Galveston, TX (04/2015 – 10/2018)

Health Physicist working with Art Palmer and Mark Somerville on this decommissioning project. Successfully supported the release of the STURGIS from all radiological controls and the release of the vessel for ship D&D. Designed and authored NCSI Plan and Final Status Survey Plan for the pier and reporting of release surveys of the vessel following the MARSAME release guidance. Performed peer review of survey reports and plans for technical accuracy and methodology. Reviewed and identified data gaps and recommended solutions. Interfaced with USACE regarding regulatory compliance of the survey design and work plans. Performed ALARA planning during the removal of high activity components and shielding design for safe handling, packaging, and disposal of radiological wastes, including the Reactor Vessel. Updated the divisions Radiation Protection Program and procedures. Prepared and submitted all paperwork for the application of an NRC D&D service license. NRC granted the service license early 2020 to Atkins Nuclear Secured.

Atkins Commercial, Radiation Safety Officer / Project Manager / Radiological Engineer, Oak Ridge, Tennessee, October 1992 – January 2015

Responsibilities progressed from a Radiological Engineer supporting commercial field project to Project Management, Project Health Physicist and Radiation Safety Officer. Oversaw the implementation of the Radiation Protection Program and the overall Project Management on multiple field Decontamination and Decommissioning projects including NRC and State license terminations. Other responsibilities included the oversight of field laboratory operations, survey design, radioactive waste management and shipping, Project Plan Development and Report writing.

Radiological Engineer and Project Health Physicist, Mallinckrodt Pharmaceuticals Nuclear Medicine Remediation and License Termination Project, Charlotte, NC (06/2012 – 12/2017)

Responsible for all site health physics support, laboratory operations, and the unconditional release of the site with NRC concurrence for license termination.

Project Manager/Health Physicist, Breckenridge Disposal Site Remediation, AECOM Corporation, Richland, WA (02/2009 – 11/2011)

Responsible for all on-site health physics support, on-site laboratory operations, and unconditional release of the site (approved by the NRC April 2012).

Knolls Atomic Power Laboratory, General Electric, Radiological Engineer, Schenectady, New York, November 1989 – October 1992

Provided radiological controls guidance and technical support for the site radiological facilities (radioactive waste processing, chemistry laboratories, hot cell facilities, materials fabrication labs and the physics experiment facility). Prepared, reviewed and approved technical work documents and procedures. Ensured compliance with Naval Reactors (NR) and Department of Energy (DOE) regulations.

SSSB D&D Organization Position: Contractor Quality System Manager

NAME: Randy McBride, CHMM, CQA

Professional Qualifications Summary

Mr. McBride has 31 years of experience and is part of a consultant project team performing sampling and analysis of environmental media and associated quality assurance. He has provided quality management, QA/QC, quality auditing, and process improvement to DoD projects. His field experience includes working with chemical warfare agents (CWA), industrial chemicals, and radiological wastes, including their sampling, testing, and disposal.

Relevant Experience

Aptim Federal Services, LLC, QC Manager, July 2017 – Present

QAM, AFFF Replacement, Marine Corps Installations West and Northwest Naval Installations, Various Locations (01/2020 – Present)

Under this \$4.6M FFP TO, supported QC and compliance monitoring management for the USACE for the removal/disposal of Carbon 8 (C8) AFFF concentrate and replacement with Carbon 6 (C6) AFFF. Responsible for onsite QC management, processes, and oversight including inspection, coordination, and documentation. Responsible for ensuring compliance with QC plan and scope for the replacement of various fire-fighting storage/piping systems and vehicles that are scheduled for removal/replacement on six US Navy and Marine Corps installations in California, Arizona, and Washington.

QAM, Environmental Remediation, Jacobsville Neighborhood Soil Contamination Superfund Site, USACE Omaha MEGA, Jacobsville, IN (02/2019 – 01/2020)

Under this \$11M cost plus fixed fee (CPFF) TO, provided QC oversight and management of field activities for the USACE under contract from the USEPA for dig and haul remediation of 15,600 tons of lead and arsenic-contaminated soil and site restoration of 262 residential properties in 8 months under CERCLA. Responsible for QC oversight/inspection of excavation, backfilling, restoration, and site close out phases. Prepared daily/weekly status and QC reports, all quality program deliverables and documentation, and held quality and client meetings. Inspected, tested, documented, and tracked all incoming site restoration materials. Coordinated with the USACE all final inspections/punch lists and waste manifesting. Collected, documented, and shipped all project air and restoration material samples. Prepared monthly air monitoring reports and data summaries and helped complete the project final report including data summaries and QC reviews.

Onsite QC Manager, D&D of MH-1A Reactor on STURGIS Barge, Galveston, TX (08/2017 - 02/2019)

31 years

of QA experience

Education

- ▶ BA, Chemistry
- ▶ BA, Biology

Highlights

- ▶ 31 years of QA experience for federal environmental projects, including overseeing field screening work that consists of the D&D Sturgis M1-A Barge project, radiological surveys, disposing of radiological waste management, and radioactive safety/monitoring.

Registrations/ Certifications

- ▶ Certified Hazardous Materials Manager (CHMM), #149900, Nationwide
- ▶ USACE Construction Quality Control Manager, Nationwide

Training

- ▶ Hazardous Materials General Awareness, Function-Specific, and Security Awareness, 2015
- ▶ Rad Worker II, 2015
- ▶ OSHA 30 Hour Construction Safety, 2010
- ▶ OSHA 8 Hour Hazardous Waste Supervisor Training, 2010
- ▶ Radiation Safety and Operator Training for Field Portable XRF Analyzers, Innov-X Systems Inc., 2007

The former nuclear reactor, MH-1A located on the STURGIS barge was built and used by the US Army. From 1968 until 1975, STURGIS provided electricity to the Panama Canal Zone. In 2014, the USACE towed the reactor barge from Fort Belvoir, VA to Galveston where APTIM removed all the radioactive and hazardous materials and components. On September 2018, the STURGIS was towed to the International Shipbreaking yard in Brownsville, TX for breaking, recycling, and final disposal. Provided onsite QC support and oversight for all decommissioning and final radiological surveying activities in Galveston and all shipbreaking activities in Brownsville. Completed daily work inspections and QC reports, attended status meetings, and provided QC training to project personnel. Maintained site photolog and QC records for the project. Authored major sections of the STURGIS D&D final project report. Received "Exceptional" rating on final USACE CPARS for Quality.

QCM, Environmental Remediation, USAEC Program Management Contract, Redstone Arsenal (RSA), AL (03/2017 – 09/2019)

Under this \$10.3M CR TO, supported MEC/UXO remediation and documentation and QC of remedial activities under RCRA. Provided QC oversight and management for five sites on RSA containing buried recovered CWM and MEC. Conducted QC of an AGC study to determine if AGC methods could reduce the number of anomalies for excavation. APTIM used Geonics EM31-SH and Geonics EM61-MK2 instrumentation to identify more than 11,000 single-point anomalies across the 55-acre industrial zone. Provided UXO field team oversight, collected soil samples from potentially CWM-impacted areas for chemical agent screening analysis followed by offsite chemical analysis (at contracted commercial laboratories). Reviewed screening data managed and tracked all samples for distribution and provided input into UXO daily quality reports.

QCM/CQCS/Chemist, Site Remediation, USACE, Redstone Arsenal, AL (2012 – 2016)

Under this \$30M FFP contract, supervised QC and served as Project Chemist for CERCLA RI/FS projects at 18 surface media operable units and 15 groundwater units. He oversaw characterization and disposal sampling at a former Lewisite manufacturing facility and onsite real-time XRF waste pre-characterization analysis to segregate arsenic-contaminated soil into piles for further testing and treatment. He set up the onsite XRF laboratory and ensured quality of samples, reviewed analytical data packages, and interpreted data for quality reports and summary tables.

QCM, Pine Bluff Arsenal, MMR, ERS, and CWM, USACE Huntsville WERS, Pine Bluff Arsenal, AR (08/2011 – 10/2014)

Under this \$5.3M, CPFF TO, provided QC oversight for the CERLCA investigation of two sites during the field effort investigating anomalies resulting in the recovery and onsite demilitarization of MEC sites. Performed quality audits by developing checklists based on requirements, interviewing project staff, reviewing project documents and objective evidence of quality performance, observing project activities, and issuing corrective actions. Verified that all findings were correct or corrected. Performed QC on plans and RI and FS reports.

ATTACHMENT 4
SURETY COMMITMENT LETTER



January 31, 2020

Naval Sea Systems Command (HQ)
1333 Isaac Hull Ave SE
Washington Navy yard, DC 20376-2030

Re: Naval Surface Ship Support Barge (SSSB) Dismantlement and Disposal
Solicitation # N0002418R4339

Dear Sir/Madam:

It has been the privilege of Argonaut Insurance Company ("Argo Surety")¹ and/or its underwriting team to have provided surety bonds for Aptim Federal Services, LLC. Aptim Federal Services, LLC is an account in good standing with our company.

It is our opinion that Aptim Federal Services, LLC is qualified to perform the above captioned project. At their request we will provide a performance bond valued at 20% of the total proposed price to be effective the date the Contractor takes possession of the SSSB.

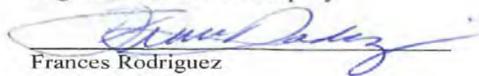
Please note that the decision to issue surety bonds is a matter between Aptim Federal Services, LLC and Argo Surety, and will be subject to our standard underwriting at the time of the final bond request, which will include but not be limited to the acceptability of the contract documents, bond forms and financing. We assume no liability to third parties or to you if for any reason we do not execute said bonds.

Argo Surety is "Treasury Listed" by the U.S. Department of the Treasury with an underwriting limitation expressed therein of over \$89,568,000.00. The A.M. Best Company has assigned Argo Surety a rating of "A" with Financial Size Category of XIV. Argo Surety is fully licensed and authorized to write bonds of this size and type in the State of Alabama.

If you have any questions or need any additional information, please do not hesitate to contact me.

Sincerely,

Argonaut Insurance Company


Frances Rodriguez
Attorney-in-Fact

¹ Argo Surety is an A (Excellent) A.M. Best rated insurance company (Financial Size Category XIII (\$1 billion to \$1.25 billion)).