

CURRICULUM VITAE – BRUCE MILLER, M.S., CIH

AREAS OF EXPERTISE

Comprehensive Industrial Hygiene and Safety
Expert Health and Safety Consulting Services
Decontamination, Decommissioning and Construction
Environmental Remediation and Waste Management
Microbial Investigations and Indoor Air Quality

EDUCATION AND CERTIFICATION

M.S., Industrial Hygiene, Central Missouri State University, Warrensburg, MO
B.S., Industrial Technology, Southern Illinois University, Carbondale, IL
A.A.S., Bioenvironmental Engineering Technology, Community College of the Air Force
Certified Industrial Hygienist (CIH), American Board of Industrial Hygiene, (ABIH) #6439

SUMMARY OF QUALIFICATIONS

Mr. Miller is a board-certified industrial hygienist with more than 25 years of experience in comprehensive health and safety practice and 20 years of specialized environmental remediation and construction experience at Department of Energy, U.S. Army Corps of Engineers (USACE), and Department of Defense (DOD) clients and sites. He has managed and supervised health, safety, and health physics personnel and provided project management, planning, regulatory support, and oversight to numerous environmental remediation (ER), waste management (WM), construction, decontamination and decommissioning (D&D), and microbial/Indoor Air Quality (IAQ) investigations and remediation projects and served as an expert consultant investigating and preparing expert reports for both plaintiffs and defendants in cases related to industrial accidents and regulatory compliance.

Mr. Miller has developed and implemented comprehensive health and safety programs and the supporting field documents to meet federal (DOE, DOD, USACE, FAA, DOI, HLS), state, and local regulatory compliance. He has provided project management, direct health/safety/environmental/radiological field oversight of remedial investigation/feasibility study (RI/FS), remedial design/remedial action (RD/RA), construction and D&D projects at some of the most complex hazardous and mixed waste sites in the country. Projects have included excavation, drilling, sampling, hurricane recovery, new construction, demolition and reconstruction, and waste retrieval in radioactive, transuranic (TRU) mixed waste pits, high explosive fragment sites throughout the DOE Complex and numerous DOD facilities. He has broad-based experience in health, safety, and radiological regulatory compliance at national DOE laboratories, DOD facilities, US Navy, numerous USACE Districts, construction sites, and for industrial and commercial clients. He currently serves on national committees for the American Industrial Hygiene Association (AIHA) (Past Chair/Member of the Law Committee & Member of Indoor Environmental Quality Committee member) and was a past Chair of the AIHA's Consultants Special Interest Group (SIG).

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CURRENT AND PAST EXPERT LEGAL WORK

Plaintiff Expert – Case No. 4:15-cv-05087, State of Washington, Plaintiff, v. Ernest J. Moniz, Secretary of the United States Department of Energy, the United States Department of Energy, and Washington River Protection Solutions LLC, Defendants – Since May 2016, serving with a team with other experts as the State of Washington Attorney General’s (WAG) (Plaintiff) industrial hygiene expert in this case involving long standing worker exposures to tank farm vapors at the Department of Energy Hanford Site Tank Farms. Services have included review of the WAG complaint, declaration for injunctive relief, discovery documents and reports, worker exposure incidents and medical surveillance, plaintiff regulatory requirements and contractor implementing program and procedures and other related expert reports, declarations and depositions. I have prepared two declarations in support of the WAG’s injunctive relief and supplemental preliminary injunction as well as several draft expert reports. Additional support has included drafting lines of inquiry for Defendant (Department of Energy and Contractor) health and safety experts and management personnel depositions related to worker health and safety and exposure events, provided expertise on exposure mitigation, work process, engineering controls, personal protective equipment, respirator cartridge testing, medical surveillance, and ongoing technical expertise and support during settlement discussions with the U.S. Department of Justice.

Defendant Expert – Case No. CV-2014-300, Danita Bachman and Clayton Snook (P) v. The Jud 2000 Trust, Eugene D. Jud and Janice A. Jud, Trustees; Cid E. Hayden and John Doe Persons or Entities I through V (D), State of Idaho, in and for the County of Lemhi – Served as Defense industrial hygiene expert investigating water damage and subsequent microbial growth at the Plaintiff’s residence. Plaintiff asserts Defendants irrigation methods are flooding the crawlspace of the home. Conducted an investigation of the residence including visual and physical inspection, testing of building materials for moisture content, performed thermo-imaging of building materials, and collected air samples for laboratory analysis to quantify types of mold spores present; reviewed Plaintiff’s expert’s report and methodology and prepared lines of inquiry for Defendant counsel use during Plaintiff expert’s deposition; prepared and submitted expert report with opinions to Defense counsel. Testified at trial as Defense expert for nature and extent of water damage and mold growth, sources of water damage and mold growth and required remediation for reoccupancy.

Plaintiff Expert - Case 4:15-cv-00165-EJL, Ralph Stanton (P) v. Battelle Energy Alliance (D), U.S. District Court, District of Idaho – Served as Plaintiff safety and health expert examining nature of accident and exposure of workers to plutonium contamination at the Zero Power Physics Reactor facility located at the Department of Energy, Idaho National Engineering Laboratory. Reviewed all relevant radiological, safety and industrial hygiene data and procedures; operational procedures and work packages; prepared lines of inquiry for deposition of Defendant key management and technical staff; reviewed deposition transcripts and supported Plaintiff counsel during and following depositions. Served as the technical manager and prepared the scope of

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work for radiological survey of Plaintiff's home by third party and analysis of all samples collected. This case was settled prior to the completion of my expert report and opinions, deposition or expert testimony.

Defendant Expert - Case No. 4:10-CV-184-EJL, Roy Santo (P) v. Acuity Brands Lighting, Inc; Lon Ricks Electric, Inc. (D), United States District Court for the District of Idaho – Served as Defense safety and health expert for the construction accident case involving a fall from a ladder resulting in a severe laceration from an exposed metal light fixture resulting in a permanent disability. Reviewed nature of the accident and conducting an accident investigation and multiple root causal analysis based upon available records and photos. Analysis consisted of reviewing all available accident reports and witness statements; Occupational Health and Safety Administration construction regulatory review of applicable standards including multi-employer worksites; ladder manufacturer's use and limitation; Plaintiff's and Defendant's witness's deposition review; and developed lines of inquire for Defendant counsel for Plaintiff deposition. Prepared expert report with opinions and submitted to Defense counsel. This case was settled prior to my being called as an expert to offer my opinions for deposition or at trial.

Plaintiff Expert - Case No. CV-09-4235, Scherr & Scherr, LLC (P) v. Kirk Wolfe (D), District Court of the Seventh Judicial District of the State of Idaho in and for the County of Bonneville – Served as Plaintiff industrial hygiene expert in case involving construction defects and latent damage caused by water damage to Plaintiff's professional building during construction. This expert work followed a water damage and microbial assessment of the Plaintiff's building (The Sleep Institute). Expert analysis on the nature and extent of the water damage was conducted. Analysis included a complete review of my previously microbial assessment and report; review of the construction timeline and material storage practices on site; analysis of the weather condition at the time of the construction activities where building materials were not enclosed; comparative water damage analysis with other assessments that I had conducted. My expert report was prepared and submitted to Plaintiff counsel. This case was settled prior to my being called as an expert to offer my opinions at deposition and trial.

Plaintiff Expert – Case No. CV-06-275, Sherry Fuqua V. Paul Olsen dba Paul Olsen Trucking; Paul Olsen, Individually; Marion Jerry Weaver, and John Does I-V, District Court of the Fifth Judicial District of the State of Idaho, in and for the County of Blaine – Served as Plaintiff safety and health expert examining nature of an industrial work accident involving the Plaintiff who was a driver for the Defendant. Plaintiff was atop a truck when another driver moved the vehicle causing the Plaintiff to be dragged then thrown from the truck against a wall. A comprehensive review of Defendant's accident investigation, records and photos was conducted; Defendant trucking and operational facility procedures reviewed; training and other human resources records for the Plaintiff reviewed; fall restraint and other safety device manufacturer's use and limitations literature analyzed; and an accident root cause analysis developed. Additionally, lines of inquiry for Defendant witness depositions

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were prepared and discovery item requests submitted to Plaintiff counsel for consideration. This case was resolved before the expert report and opinions were completed. No expert deposition or testimony was given in this case.

Defendant Expert – Hymas v. Rockwell Homes, Inc., United States District Court for the District of Idaho – Served as Defendant safety and health expert for the construction accident case involving a fall of a worker from an elevated platform onto a piece or exposed rebar at a residential construction site resulting in an injury. Case involved multiple construction contractors, subcontractors and staffing agency that the Plaintiff worked through. A review of all available accident records, medical information, and photos was conducted; construction contracts were reviewed for terms and conditions and areas of responsibilities/oversight at the site; and applicable Occupational Safety and Health Administration Construction Regulations were reviewed and workplace requirements for fall protection identified. Lines of inquiry for the Plaintiff witnesses were prepared and an outline of the expert report was drafted. Prior to the expert report and opinions submittal date, this case was settled. No expert deposition and testimony was given in this case.

Third Party Expert – Farm Bureau Insurance Company, Pocatello, Idaho – Contracted to conduct an expert review and evaluation of the restoration of a water damage claim, subsequent mold growth, and area remediation conducted at a private residence in Idaho. The insured alleged that mold spores were released during the preliminary water and mold restoration activities and migrated to their occupied areas resulting the mold spore contributed negatively to the Insured's health. I prepared a report with opinions based on a site visit to the insured residence, inspection of the home and interview with insured; review of the adjuster's case file, filed notes and an interview; interview with the water and mold restoration contractor; interview with the project industrial hygienist and review of their report; and review of the air, swab, and bulk microbial sampling data contained within the industrial hygienist report. Expert opinions were provided in my report. No further services were requested following the delivery of my report to the client.

RELEVANT EXPERIENCE

President, Health and Safety Services, LLC
Idaho Falls, ID
2013 - Present

Responsible for day-to-day operations and marketing services for Health and Safety Services, LLC (HSS) which is focused on providing high-quality expert health and safety consulting services to clients. Primary HSS technical consulting services consist (1) Health and Safety Compliance and Consulting - compliance, inspections, violation mitigation and corrective actions, and development of regulatory complaint programs and policies; (2) Worker and Area Exposure Assessments - development of occupational exposure assessments in compliance with AIHA Exposure Assessment methodology including evaluation of exposure groups, engineering controls, work procedures, and personal protective equipment usage. This generally includes conducting exposure monitoring or sampling to document exposures and provide defensible exposure data as required by OSHA; (3) Expert Consulting and

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Report Writing - provide health and safety legal expert consulting and prepare expert reports for cases involving worker injuries and exposures, accidents and regulatory compliance matters; (4) Expert Testimony - serve as a testifying health and safety expert for cases involving worker injuries, exposures, accidents and regulatory compliance matters typically following expert consulting and report writing services. HSS specializes in expert case consulting in matters involving worker accidents, occupational exposures, injuries and OSHA compliance and has represented both plaintiffs and defense in cases.

President, North Wind Solutions, LLC
North Wind Group
Idaho Falls, ID
February 2011 – 2013

As President, Mr. Miller provided vision and leadership by identifying new clients, business lines, and opportunities and ensuring that all work is carried out in a professional, technically complete manner. He served as the single point of contact with the Small Business Administration (SBA) and is responsible for developing and approving all business plans, joint venture agreements, and SBA 8(a) program compliance. He supervised project managers and met directly with clients to ensure all technical and contractual deliverables were completed on schedule and within budget. Mr. Miller ensured that operations of NW Solutions meet the philosophy, mission, strategy, and business goals and objectives of the North Wind Group. He ensured that corporate policies and programs related to health and safety, quality, procurement, contracts, and human resources are implemented on a daily basis and provided quarterly operational reports. Under Mr. Miller's leadership, North Wind Solutions grew from a startup to successful SBA 8(a) certified firm with a second SBA certified 8(a) Joint Venture with a combined backlog of more than \$12M in less than two years. Additionally, he was responsible for obtaining an Alcohol, Tobacco, Firearms and Explosives (ATF) explosive license and served as the corporate Responsible Person for the ATF license responsible to ensure all employee possessors purchasing, storing and handling explosives were compliance with ATF regulations and license requirements.

Sr. Vice President, Corporate Health, Safety and Security Officer
North Wind Group and all subsidiary companies
Idaho Falls, ID
February 2009 - 2011

Served as the corporate point of contact for health, safety and security matters for the North Wind Group and 6 subsidiary companies consisting of over 400 employees working from 18 offices throughout the US and with revenues exceeding \$100M annually. Reported to the President of the North Wind Group and developed and implemented all health, safety and security programs and procedures, tracked and report performance metrics and took correction actions where needed to improve performance. Under Mr. Miller's leadership, the North Wind Group and subsidiary companies maintained an experience modification rate (EMR) well below their industry averages, obtained and maintained two OSHA Voluntary Protection Program (VPP) STAR sites, was awarded the OSHA VPP Star among Stars award, and was successful at having several years with zero OSHA recordable or lost-time injuries.

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As the Facility Security Officer (FSO), Mr. Miller controlled all aspects of the North Wind Group and subsidiary Department of Defense and Department of Energy facility security clearances including developing all security and operational security plans, maintaining government contractor required security databases, facilitating new subsidiary company and personnel clearances, and interfacing with government agency security and counter-intelligence/terrorism counterparts during audits and program oversight to ensure compliance with security regulations.

Vice President, Corporate Health and Safety Director

North Wind, Inc.

Idaho Falls, ID

February 2004 - 2009

Developed and maintained all corporate health, safety, and radiological programs; reviews and approves project health and safety plans and procedures for all North Wind Group Companies including natural and cultural resources, remediation, treatment, construction, demolition projects and operating facilities. Health, safety and security lead for 18 North Wind offices and provide direct support to projects in all North Wind Group geographic locations. Worked with workers compensation policy holder, professional organization, OSHA VPP Program office and remediation industry H&S professionals to ensure all programs provided for an effective safety culture and corporate H&S goals are met. Supported strategic planning, teaming and proposal development, project management, and served as a technical resource for internal and external customers. Provided expert consultant and witness industrial hygiene and safety services and testimony for attorneys regarding accidents, exposure assessments, microbial/IAQ, safety issues and other health and safety related cases.

He has written procedures, conducted training, and established medical surveillance programs to control exposure to radionuclides, heavy metals (arsenic, asbestos, beryllium, cadmium, chromium, lead), mercury, and solvent contaminants in compliance with OSHA substance standards at uncontrolled hazardous waste sites. Project sites have included waste pits/trenches, contaminated soils and underground storage tanks, mine tailing piles, landfills, drummed hazardous waste, UXO/MEC, radioactive structures and piping, and radioactive and mixed (hazardous/radioactive) waste and debris locations throughout the US for the DOE, US Air Force, US Coast Guard, US Army, NAVFAC, USACE, commercial, and private clients.

PAST MAJOR PROJECTS

Program Consultant, HSS, LLC– North Wind Solutions, LLC for the U.S. Navy, Space and Naval Warfare Systems Command (SPAWAR), SPAWAR Systems Center Pacific, Marine Mammal Program (MMP), San Diego, CA – Served as the program consultant to transition program manager responsibilities to new North Wind Solutions corporate sponsor and program manager. Facilitated client and staff meetings, reviewed program operations metrics and budgets, provided budgeted staffing levels and recommended changes to increase efficiency. Additionally, wrote revision to the North Wind Dive Safety Manual and developed all Dive Plans/Dive Hazard Analysis

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for all topside and underwater dive operations to meet requirements of OSHA 29 CFR Subpart T, Commercial Diving requirements. Developed fiscal year end metrics to provide to client demonstrating all contractual performance objectives were met or exceeded with zero change orders or client concerns.

Corporate Sponsor/Program Manager – U.S. Navy, Space and Naval Warfare Systems Command (SPAWAR), SPAWAR Systems Center Pacific, Marine Mammal Program (MMP), San Diego, CA – Developed the technical and cost proposal and served as chief negotiator to secure this \$6M+ 3-year firm fixed price contract to serve as the construction and maintenance contractor for the Navy’s MMP. Program included constructing, maintaining and cleaning mammal enclosures and associated docks and platforms, storage sheds, and support MMP operational buildings. Routine diving and boat operations were required to maintain MMP locations throughout the San Diego area. Additional responsible for emergency and requested maintenance of two additional MMP locations in the pacific northwest and south Atlantic regions. Developed all operational metrics and budgets and conducted oversight to ensure client requirements and MMP animal safety was met. Developed new dive program and dive medical surveillance protocol, upgraded all dive gear, created new maintenance database, improved dive efficiency through better scheduling and coordination of dive tasks with MMP personnel, and exceeded all contractual performance metrics while maintaining the project above the profit target.

Project Health and Safety Manager - U.S. Department of Homeland Security, United Stated Coast Guard, Base Support Unit, Pier 36, Building 3, Seattle, WA – Served as project health and safety manager and principal certified industrial hygienist to provide direct support and oversight of lead paint removal and encapsulation of the Pier 36, Building 3, a single-story warehouse structure constructed in 1930 with a footprint of approximately 200,000 ft². Approximate \$15M contract requires extensive scaffolding erection (large area scaffolding spanning approximately 12,000 ft² for each area abated with 4-6 levels up to 50 feet high) and negative pressure HEPA-filtered lead abatement containment be constructed over existing occupied office and command facilities to isolate personnel during media blasting, cleaning and encapsulation of lead-based paint located on building metal trusses, asbestos corrugated roofing and walls. Extensive air sampling and ventilation pressure monitoring of containments was conducted to provide objective evidence to USCG Command and occupants that lead control work area containment integrity and controls are functioning adequately during their occupancy. All work was completed with zero OSHA recordable injuries and all lead exposures to abatement workers and outside containment were well below the established exposure limits.

Project Health and Safety Manager – U.S. Department of Energy (DOE), Idaho National Laboratory (INL), Pit 10 Accelerated Retrieval Project (ARP) VII Design/Build Construction Project – Served as project health and safety manager responsible for preparation of all health and safety documentation to meet DOE requirements for the \$17M design and construction of a retrieval enclosure structure to be used to remediate transuranic mixed waste located in the Subsurface Disposal Area

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of the Radioactive Waste Management Complex at the INL. Facility was constructed as a Category 2 nuclear facility. Health and safety documentation including 10 CFR 851, *Worker Safety and Health Program*, Integrated Safety Management System, Construction Safety Plan, Hoisting and Rigging Plan, and all work packages associated Job Safety Analysis in compliance with Occupational Safety and Health Administration (OSHA) 10 Code of Federal Regulation (CFR) 1926, *Construction* standards. Additionally, responsible for establishing and overseeing all medical surveillance requirements and served as the North Wind representative for all site stabilization agreement and collective bargaining associated with trade unions represented worker that were direct hired by North Wind.

Project Manager/Lead Investigator – U.S. Army Corps of Engineers, Savannah District, Air Sampling Analysis for Mold Prevention Technology Demonstration Project, Ft. Gordon, GA - Served as Project Manager/Lead Investigator evaluating two ventilation system treatment technologies (UV light and hydrogen peroxide) installed to destroy airborne biological contaminants in multiple HVAC air handling units serving Army Barracks where Warriors in Transition (service members from Operations Enduring Freedom and Iraqi Freedom injured in combat who are transitioning back to civilian status). Study consisted of conducting a series of five rounds of air sampling (baseline and 4 quartering rounds) for microbial contaminants using culturable media (MEA and GD18) and non-viable spore traps up and down streams of the return air HVAC treatment units in two barracks, two control barracks, and outdoor background locations to determine speciation and count for vegetative and non-vegetative of fungi. Additionally, HVAC parameters such as particle counts, air flow, temperature, relative humidity, CO₂ and percent fresh air are being measured for each HVAC air handling unit and branches are being measured. The final report and results were used for the selection of the preferred HVAC treatment system technology throughout the Army Engineering Command Southeast District.

U.S. Department of Homeland Security, United States Coast Guard, Integrated Support Command, Kodiak Air Station, AK - Served as health and safety manager and lead industrial hygiene technical consultant for multiple task orders at the Kodiak, Alaska USCG station and USCG facilities in Seattle, WA. Projects completed included asbestos and lead based paint remediation projects of barracks, dining facilities, and other common areas; lead contaminated soils characterization and removal; installation of a vapor recovery extraction system in barracks/common area crawlspaces to mitigate groundwater chlorinated solvent contaminants; conducting IAQ study of occupied barracks and common areas to define military/patron risk; remediation and demolition of housing and surplus USCG facilities and contaminated areas.

Prepared all hazardous materials abatement plans, oversight of CIH conducting asbestos PCM (occupational) and TEM (clearance) air sampling, approved all asbestos and lead abatement plans, and writing technical reports summarizing hazardous materials abatement and clearance of common areas.

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Provided industrial hygiene technical consulting for the design, installation and commissioning and balancing of multi-building vapor intrusion remediation systems to place crawlspaces under negative pressure (with respect to occupied areas above) to eliminate ground water contaminants TCE and PCE vapors from entering barracks and common areas above. Conducted commissioning testing and balancing of all ventilation system components and all associated baseline and post-commissioning indoor air studies using EPA Method TO-15 Volatile organic compounds (VOCs). Prepared technical memorandums for USCG summarizing air study results and supported USCG with technical discussions with U.S. EPA Region 10 related to military occupant/patron risk.

Technical Consultant – U.S. Department of Energy, Office of River Protection, Hanford Site, WA – Provided an Independent Government Cost Estimate (IGCE) evaluation and report of the Washington River Protection Solutions (WRPS) 10 CFR 850, Chronic Beryllium Disease Prevention Program (CBDPP): Final Rule implementation cost submittal to DOE Office of River Protection (ORP). This WRSP CBDPP costs estimate was developed for the Hanford Tank Farm Beryllium Program to align all programmatic elements with the Hanford Site-wide CBDPP. IGCE was developed using engineering assessments, cost estimating relationships, and vendor quotes and technical basis for differing CBDPP element costs approaches. All assumptions and methodology were provided in the final report to DOE ORP.

Program Health and Safety Manager – Bureau of Land Management, Hazardous Materials Emergency Response Contracts (State of Utah and Idaho), statewide locations (2003 – present) - Served as the health and safety manager developing all programmatic H&S documents and approving all project-specific Health and Safety Plans, prescribed medical surveillance and monitoring, OSHA 29 CFR 1926 regulatory interpretations, and provided oversight for all emergency and planned remediation actions conducted under these state-wide contracts. Projects completed included emergency response to numerous spills and illegal dump sites. Planned responses have included reclamation of mine sites, illegal asbestos dump sites, contaminated structures and heavy metal mine tailings, and the safe demolition and closure of BLM structure and mine adits.

Program Health and Safety Manager – Bureau of Land Management, Anvil Points Remediation Project, Rifle, CO - Served as the health and safety manager and providing ongoing technical project support to removal of over 200,000 cubic yards of spent oil shale tailings and placement in a North Wind design/build repository. Prepared and approved Site-safety and health plans, developed area and personal air sampling strategies, directed medical surveillance, and provided engineering controls to minimize airborne and contact exposure to arsenic, lead and PAH contaminants associated with shale tailings as well as buried asbestos transite piping. Provided safety oversight and direction for mine adit closure and construction of 70,000 cubic yards of spent shale yard in an engineered repository.

LANL Environmental Program Support – Department of Energy, Los Alamos

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National Laboratory, NM - Provided technical project support services for numerous task orders issued under North Wind, Inc's master service contract with Los Alamos National Security, LLC (LANS). Prepared Environmental Program-Wide Environmental Safety and Health Plan and project specific Site Safety and Health Plans to meet the requirements of 10 CFR 851, Worker Safety and Health Program and 29 CFR 1926.65, HAZWOPER, respectively. Projects included, TA-21 ISS tritium component removal, LANL Baseline Industrial Hygiene Exposure Assessment, Industrial Hygiene Support for LANL Beryllium Project, TA-54 Performance Assessment and Low Level Waste Operations, and LANL Master Drilling Contract.

U.S. Department of Homeland Security, United States Coast Guard, Integrated Support Command, USCG Kodiak Air Station, AK - Served as health and safety manager and lead industrial hygiene technical consultant for multiple task orders at the USCG station Kodiak Island, Alaska. Projects completed included asbestos and lead based paint remediation projects of barracks, dining facilities, and other common areas. Prepared all hazardous materials abatement plans, oversight of CIH conducting asbestos phase contrast microscopy (PCM) occupational and transmission electron microscopy (TEM) clearance air sampling, approved all asbestos and lead abatement plans, and writing technical reports summarizing hazardous materials abatement and clearance of common areas. Provided industrial hygiene technical consulting for the design, installation and commissioning and balancing of multi-building vapor intrusion remediation systems to place crawlspaces under negative pressure (with respect to occupied areas above) to eliminate TCE and PCE vapors from entering barracks and common areas above. Conducted commissioning testing and balancing of all ventilation system components and all associated baseline and post-commissioning indoor air studies using EPA Method TO-15 for volatile organic compounds (VOCs). Prepared technical memorandums for USCG summarizing air study results and supported USCG with technical discussions with U.S. EPA Region 10 related to military occupant/patron risk.

Program Health and Safety Manager, Sustainment, Restoration, and Modernization Task Order Contract (SATOC), U.S. Air Force Civil Engineering Support Agency, Worldwide – Served as the Health and Safety Manager for all SATOC task orders. Prepared, reviewed and approved all site safety and health plans; subcontractor safety programs and plans, and H&S-related technical submittals; oversaw all H&S compliance; performed program H&S audits and inspections; supervised and provided technical guidance to all assigned field site safety officers; determined/oversaw medical surveillance requirements; served as subject matter expert for all H&S issues and compliance. Projects on-going or completed have included:

- Charleston AFB, SC – Runway/Taxiway Replacement and Upgrades- \$28M
- Malmstrom AFB, MT – Mechanical System Upgrades/Replacement - \$3M
- Holloman AFB, NM – Various civil projects – \$6M
- Moody AFB – Lighting and ECIP Installation - \$1.9M

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Beryllium Decontamination and Demolition Project – Former American Beryllium Company, Sarasota, FL - Served as the project certified industrial hygienist (CIH) for Environmental Dimensions, Inc for the decontamination and demolition of portions of the former American Beryllium Company. This project was being conducted for Lockheed-Martin Corporation (LMC). Primary activities included reviewing/revising the project health and safety plan, developing exposure assessments for personnel conducting decontamination tasks, reviewing all personal and area air sampling data, interacting with the LMC and community advocates to communicate beryllium exposure and airborne controls and to facilitate understanding of the health controls to ensure no releases to the adjacent housing areas.

Project Health & Safety Manager, Rocky Mountain Arsenal Projects, Denver, Co – Served as Health and Safety Manager for multiple projects at the Rocky Mountain Arsenal site in Denver, CO under contract with Tetra Tech EC, Inc. Developed and approved all Task-specific Health and Safety Plans (THASPs), determined PPE and medical surveillance, personal and areas monitoring, site s controls, and other requirements for degraded chemical warfare agents and other hazardous materials requiring level D-Level B PPE. Representative projects have included well sampling, well installation and abandonment, at various Lime Basins project sites. Met OSHA VPP STAR requirement for all site activities.

LMAES Structures and Equipment Dismantlement and Disposal (Pit 9 Facilities D&D), DOE Idaho National Laboratory, ID - Served as the Corporate Health and Safety Director and project ES&H oversight for the D&D of all LMAES structures (Retrieval Building, Remediation Treatment Facility, and all tanks, piping, and equipment located in and around the facilities) and equipment located within the Radioactive Waste Management Complex Pit 9 Subsurface Disposal and Administrative Areas. Demolition methods included deconstructing the retrieval building to relieve stress on structure; physical demolition of the concrete RTF using a combination of wrecking ball, tracked excavator with shears and processors; and shearing, sizing, and processing structures in the administrative area. Project involved significant hoisting and rigging of large (100') steel structural members and equipment as well as handling and hauling of demolition debris. Mr. Miller was responsible for writing the integrated Safety Management System (DEAR 970.5223-1, "Integration of Environment, Safety and Health into Work Planning and Execution"), Contractor Assurance System (DOE Order 226.1), Project Health and Safety Plan, and preparing North Wind prime contractor 10 CFR 851, Worker Safety and Health Program for DOE-ID approval. All contractually required plans were submitted and approved within contractually defined schedule.

Beryllium Hazard Assessment - DOE National Engineering Technology Laboratory, Albany, OR – Served as the project technical lead for the development of a beryllium hazard assessment for the DOE National Engineering Technology Laboratory Albany

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Research Facility located in Albany, OR. Scope of services include a comprehensive review of existing DOE NETL Albany CBDPP; review existing occupational exposure assessment process and procedures; review and assessment of the current baseline beryllium inventory; review and assessment of existing and ongoing Beryllium facility characterization including wipe, bulk and air sampling; statistical analysis of characterization and personal exposure data utilizing left-censored statically modeling approaches such as “R”; development of similar exposure groups and hazard ranking of these groups and specific operational areas; preparation of the written hazard assessment to provide a quantification of beryllium as a health and safety hazard as it relates to the NETL-Albany site and its operations; updating the existing NETL Albany CBDPP; and certification of the hazard assessment by a third party accredited/certified board.

FWA-102 (Taku Garden) Site Characterization and Remediation, U.S. Army Corps of Engineers-Alaska District, Fort Wainwright, AK - Served as the project health and safety manager and NWI Alaska Division Manager overseeing several Stryker Brigade projects at Ft. Wainwright located in Fairbanks, AK from April 2005 through December 2006. Projects included site characterization to delineate the extent and nature of PCB and other hazardous materials and unexploded ordinance (UXO) at a 52-acre construction site where legacy military hazardous materials were discovered through initial soils screening and excavation tasks. Mr. Miller has prepared all accident prevention plans, site safety and health plans, worker and area exposure monitoring plans, developed engineering controls to ensure no off-site releases to adjacent residential areas, and approved all munitions of concern (MEC)/UXO support plans. Project activities included surface geophysical studies (GPR, EM-31, EM-51); surface and subsurface soil sampling (direct push); installation of temporary and permanent water monitoring wells; field screening with polychlorinated biphenyl (PCB) assay kits; excavation of test pits and trenches; stockpile sorting for MEC/UXO and associated UXO and scrap disposal; handling, repacking and sampling of excavated waste drums; PCB contaminated soil handling and transportation; and comprehensive worker, resident, and area exposure monitoring. This scope of work also included two additional sites where UXO and known and unknown soil contaminants have been found. Project tasks were conducted in Level D, C and B personal protective equipment.

Former Hanger 6 Site Characterization and Remediation, U.S. Army Corps of Engineers-Alaska District, Fort Wainwright, Alaska - Mr. Miller served as the Health and Safety Manager and CIH performing various airborne volatile, semivolatile, metals, and chemical warfare agent compounds during soil sampling, liner installation, and excavation of potentially contaminated soils at the former Hangar 6 site located at Fort Wainwright, Alaska. All work was conducted in Level B (supplied air/chemical resistant clothing) and included personal, perimeter (project fence line), soil gas, and direct reading air monitoring was conducted to gather chemical source and exposure data used to further evaluate potential construction worker reported symptoms who were excavating soil at the former Hangar 6 site in July 2006.

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Area and personal air samples were collected and analyzed in accordance with selected National Institute of Occupational Safety and Health (NIOSH), Occupational Safety and Health Administration (OSHA), Environmental Protection Agency (EPA) Toxic Organic (TO) Compendium Method TO-15, and Laboratory Modified NIOSH methods.

Direct reading instruments (including a photoionization detector [PID] with an 11.7 eV lamp, flame ionization detector [FID], and MSA HAZMATCAD Plus [material chemical agent detector/chemical warfare agents] were calibrated and operated in accordance with the manufacturer's operating instructions. All air and soil gas sampling and direct reading monitoring of workers was performed by the North Wind Project Health and Safety Manager who is a Certified Industrial Hygienist (CIH).

Hurricane Katrina Damage Assessments, Demolition and Reconstruction, U.S. Air Force Center for Environmental Excellence (AFCEE), Worldwide Environmental & Construction (WERC) Contract, Kessler AFB, MS – Served as the health and safety manager for this \$12M+ project and task lead for all damage assessments. North Wind is providing turnkey damage assessments, demolition and reconstruction services of facilities and grounds in response to hurricane Katrina damage at Keesler Air Force Base (AFB), located in Biloxi, Mississippi under North Wind's the US Air Force Worldwide Environmental Restoration and Construction (WERC) contract. North Wind mobilized to the base within 3 days in response to a Government notice to proceed and conducted damaged assessments of several facilities and base grounds. Mr. Miller served as the lead for all water damage and mold assessments of occupied and abandoned structures performing visual inspections of all buildings, thermal imaging of building surfaces, taking moisture meter measurements of building materials, and delineating all materials to be remediation through each structure. He also prepared all asbestos and mold remediation specifications for all water damaged and mold affected building materials including containment requirements, remediation protocols, structural drying, and post-remediation assessment criteria. In addition, Mr. Miller prepared all project health and safety plans (HASP) and specifications for each scope of work that addressed all project activity hazards, hazard mitigation, and contingencies associated with facility demolition and reconstructions as well as grounds remediation. Demolition and reconstruction scope included the Keesler AFB marina and associated facilities, security building, contracting building, dormitories, NCO billeting building, debris and stump removal and repair/replacement of various docks. He oversees all safety and health officers assigned to the project. *All project work was completed without a single recordable or lost time injury.*

Hurricane Damaged Facility Demolition and Reconstruction, U.S. Air Force AFCEE WERC, Various Gulf Coast Bases - Served as the project health and safety manager for several projects totaling \$15M where structures are being demolished and reconstructed or renovated at Hurlburt Field Air Base in Ft. Walton Beach, FL and Keesler Air Force Base a result of Hurricanes Ivan, Dennis and Katrina. These projects were performed under NWI's US Air Force WERC contract and NWI served as the general contractor. Mr. Miller has prepared the health and safety plans and specifications other for all projects that have included a waste water treatment plant,

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marina, construction of a bridge, and renovation of the USAF Special Forces headquarters building.

In Situ TRU Waste Delineation and Waste Removal at Hanford 618-10/618-11 Burial Grounds, DOE Hanford, WA - Served as Project Health and Safety Manager – Major Project Lead for DOE-HQ Environmental Management, Technology Development and Deployment Program In Situ TRU Waste Delineation and Waste Removal at DOE Hanford, Washington 618-10/618-11 Burial Grounds. The project goal is to identify, develop, and demonstrate technologies to support accelerated Hanford site remediation. DOE fabricated fuel for the Hanford Site nuclear production reactors in the 300 Area that produced large volumes of many types of radioactive wastes, including transuranic (TRU) wastes that were disposed on in trenches and vertical pipe units (VPUs). North Wind has developed VPU retrieval technology that is being demonstrated as a proof-of-principal in a cold testing facility prior to applying this technology to the 618-10/18-11 Hanford Area. Work to date has included preparation of all work plans, health and safety plans, test plans, and procedures necessary to conduct full scale cold testing of a large diameter casing driven by a pile driver to overcore and retrieve the simulated VPU. In addition, development and field testing of surface geophysical technology and downhole nuclear logging methods are being tested to verify the technology for hot operations. The final project Phase II task will be to retrieve radioactive materials containing VPU from the Hanford 618-10/618-11 area.

Kadlec Hospital DOE Building 748 Decontamination and Decommissioning Project, DOE Richland, WA- Served as the Project Health and Safety Manager – Major Project Lead for D&D of the Kadlec Medical Center DOE Building 748 (Emergency Decontamination Facility) located adjacent to the Kadlec Medical Center in Richland, Washington. Contract scope included preparation of all work plans, demolition plan, health and safety plan, and final characterization sampling and analysis plan (prepared in accordance MARSSIM); removal and decontamination of radiologically contaminated equipment and surfaces to meet DOE Order 5400.5 release requirements; characterization, removal, and packaging for transportation of hazardous materials and waste (lead, mercury, PCBs, creosote, tritium); and abatement of friable and nonfriable asbestos containing building materials. North Wind used a track excavator equipped with various buckets, specialized shears, and processors to demolish and size above grade concrete structure and piping, excavate of buried sumps, tanks, ductwork and remove underlying contaminated soils. Building 748 facility was located within 75 feet from the hospital surgical suite and is adjacent to the emergency entrance. All demolition tasks were completed with minimal impact to the ongoing Kadlec Medical Center operations.

Operable Unit 1-10 (V-Tanks) and CERCLA Soil Area Decontamination and Decommissioning Project, Idaho National Engineering and Environmental Laboratory, ID - Prepared all health and safety documentation including site-specific health and safety plans (HASP), job safety analysis (JSA), technical procedures, and hazard screening checklists for this D&D project that consisted of removal, transfer,

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and treatment of PCB contaminated radioactive liquid and sludges from underground tanks, piping systems, and vaults located at Test Area North at the Idaho National Engineering and Environmental Laboratory (INEEL).

U.S. Army Corps of Engineers, Nationwide Remediation Services – Preparing all health and safety plans for North Wind U.S. Army Corps of Engineering projects in the Sacramento, Savannah, Omaha, Mobile and Alaska Districts. Projects include remediation of contaminated release sites; installation, operations and maintenance of vapor extraction systems; construction projects; and investigation of unexploded ordnance/ordnance and explosive (UXO/OE) sites.

U.S. Army Yuma Proving Ground, Yuma, AZ – Provided all health and safety oversight for the U.S. Army Yuma Proving Ground investigation and remediation of 600-acre range area. The area was used for range practice, demolition activities, open detonation, and open burning of explosive ordnance. UXO consisted of live rounds, submunitions, anti-personnel mines, and OE elements were nitrocellulose, TNT, RDX, and other nitrogen-based explosives.

Los Alamos National Laboratory, DOE TA-73 Airport Landfill Closure Project, Los Alamos, NM – Prepared comprehensive safety and health plan for Los Alamos National Laboratory TA-73 airport landfill RD/RA closure project. Project included conducting large scale excavation of closed landfill, retrieving debris and waste from a steep slope located approximately 100-ft above the Pueblo Canyon valley with a drag line and excavation equipment. Final fill and grading cover requirements will meet voluntary consent order RCRA Subtitle C landfill requirements. The entire landfill area was regraded. Additionally, all heavy equipment operations were conducted adjacent to the active Los Alamos County Airport runway. Health and safety procedures and plans have been prepared to be compliant with DOE O 441, 29 CFR 1910.120 HAZWOPER, 29 CFR 1926, Construction, and relevant FAA requirements.

SWSD TRU Waste Container Retrieval, DOE Hanford, WA – Provided technical and management support services to Fluor Hanford, Inc., in support of transuranic (TRU) container retrieval operations at the Hanford Solid Waste Storage and Disposal area. Services include review and revision of operating procedures for TRU container retrieval operations, container handling, and special handling for deformed, damaged, and breached containers

Advance Mixed Waste Treatment Project (AMWTP), British Nuclear Fuels Ltd, DOE Idaho National Engineering and Environmental Laboratory, ID – Provided industrial hygiene expertise to British Nuclear Fuels Ltd. (BNFL), Inc. for the \$400 million dollar Advance Mixed Waste Treatment Project (AMWTP) located at the DOE Idaho National Laboratory (INL). Served as the consulting CIH for industrial safety and hygiene programs during the retrieval, treatment, and disposal of more than 65,000 cubic meters of transuranic (TRU) mixed waste at this CERCLA site. Project activities include large scale excavation of clean overburden soils, retrieval of 55-gallon drum, boxes, and other TRU stacked waste containers, chemical and radiological screening

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and assaying of each container, transportation to processing facility, and size reduction (compaction) of containers for final shipment to repository. Focus areas of technical support included development of the personnel and area exposure assessments; sampling strategy for beryllium, heavy metals, silica, physical hazards; and oversight of the chronic beryllium disease prevention program (10 CFR 850). Additional support and oversight has been provided in the areas of respiratory protection, atmospheric monitoring and testing, statistical analysis of exposure monitoring data, and supervision of staff industrial hygienists. Provided on-site management support services during DOE ORR and follow-up DOE-HQ ORR verification to resolve technical issues related to exposure assessments.

White Sand Missile Range (WSMR) Operational and Safety Services, Las Cruces, NM – Provided safety and health technical services to BAE Systems, Inc at the DOD White Sand Missile Range (WSMR). Services include reviewing and revising the site-wide health and safety documentation, preparing multimedia inspection criteria, conducting compliance safety and health audits of operational, support, and tenant facilities. Continued periodic support of the High Energy Laser Test Facility (HELSTF) with respect to operational safety issues is also being provided.

**President/Principal Technical Consultant
Vortex Enterprises, Inc
Idaho Falls, Idaho
December 1998 – February 2004**

Wrote and reviewed safety analysis reports, hazards assessments, health and safety plans and other related safety programs for government and commercial clients. Managed and supervised industrial hygiene (IH), safety, and health physics personnel and provides project management, planning, regulatory support, and oversight to numerous ER, WM, construction, and D&D projects. Provided expertise in health, safety, and radiological engineering and hazard controls for ER, WM, construction and D&D projects including onsite investigations, evaluations, and risk assessment studies. Conducted hazard/OSHA 1910 and 1926 regulatory compliance assessments and develop strategies/products to resolve deficiencies and enhance programs. Served as the project manager, field team leader, and health and safety officer for drilling, remedial investigations, removal actions, construction, site investigations and D&D projects. He provided project management and direct nuclear operations/industrial hygiene/safety/environmental compliance/radiological field oversight for remedial investigation/feasibility study (RI/FS), remedial design/remedial action (RD/RA), and D&D projects. He has broad-based operational experience at national DOE laboratories, within the DOD at active military installations, US Army Corps of Engineers sites, construction, and private industry.

Water Damage and Microbial Assessments and Investigations - Specialty project work in water damage and microbial assessments for residential, commercial, insurance company, hotel and medical facility clients. Conducted water damage and microbial assessment utilizing physical inspection methods, moisture meters, infrared thermal imaging camera, IAQ parameter meters, and particle counters. Prepared assessment

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reports include remediation protocols and conducted post-remediation assessments to ensure all protocol requirements were met. Served as consulting expert and wrote expert reports as well as a speaker at the 2004 National Mold Symposium.

Bechtel BWXT Idaho, LLC (BBWI) Management and Technical Services – Provided technical and management support services to Bechtel BWTX Idaho, LLC (BBWI) at the Department of Energy Idaho National Engineering and Environmental Laboratory (INEEL). Mr. Miller’s support included serving as the project field team leader (FTL) and health and safety officer (HSO); writing Health and Safety Plans (HASPs), technical procedures, SO Test procedures, and operational test plans; ensuring compliance with conduct of operations, voluntary protection program integrated safety management, training requirements, and related safety analysis documents; and serving as the field team leader for numerous site investigation, remediation, technology development/deployment, and testing at transuranic (TRU) mixed waste subsurface disposal areas. Participated as member of technology design team and leads field activities for all BBWI/DOE readiness assessments for start up and implementation of new field nuclear operations as described below.

OU 7-10 Glovebox Excavator Method Project – \$90 million dollar project involved remote excavation and retrieval of TRU mixed waste drums and debris in OU 7-10 (Pit 9) located in the Subsurface Disposal Area (SDA) at the Radioactive Waste Management Complex (RWMC). Provided key health, safety, and operational expertise including writing the comprehensive operational health and safety plan; evaluation of engineering controls; development and implementation of a test plans for cold and hot operations, operating and SO test procedures for a full-scale excavation mockup facility and OU 7-10 “hot” operations at the Pit 9 nuclear facility; wrote numerous facility system startup procedures (ventilation system, dust suppression system, air emissions system, and CCTV system); preparing all job hazard analysis for cold and hot operations and incorporated hazard mitigation steps into operating procedures; drafted all decontamination and dismantlement procedures (RCS Fogging, RCS and PGS Housekeeping, Grouting the Waste Pit, RCS and PGS Characterization, Immobilizing Residual Contamination, and Decontamination of the RCS and PGS); and developed emergency plan contingencies for this state-of-the-art remote TRU mixed waste retrieval facility. The Glovebox Excavator Method Project was successfully completed eight months ahead of the enforceable milestone date.

OU 7-13/14 Integrated Probing Project (IPP) - Project involved sonic drilling, sampling, and retrieval of TRU mixed waste samples buried in pits and trenches within the (SDA) at RWMC. Mr. Miller prepared comprehensive HASPs for cold tests and all 7-13/14 IPP “hot” (buried radioactive material areas) operational activities. Served on design team developing specialized exposure monitoring, engineering controls (HEPA drill string enclosure, and glove bags), and work practices have been designed to mitigate hazards TRU mixed waste hazards. Presented health, safety, and exposure mitigation strategies to state of Idaho, DOE and EPA Region 10 regulators. Prepared detailed technical operating procedures and served as the Field Team Leader (FTL) for first-of-a-kind sonic drill rig installation of probes (lysimeters, tensiometers, vapor

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ports, visual, and moisture) within the TRU waste pits to obtain data related to radiological and organic contaminant and source term migration and transport. Served as the FTL for nuclear logging of probes (source and neutron generator), core drilling and retrieval, glovebag sampling of installed instrumented probes (including developing the radionuclide source term for shipping of the leachate samples), extensive surface geophysical studies, and diffraction tomography. Additional serve on engineering design team developing the second generation instrumented probes. All document submittals for regulatory (DOE-ID/HQ, EPA-Region 10, and IDEQ) and project reviews have been ahead of the project schedule and within or below the contractually defined budget.

Mr. Miller provided continuous technical and management services to Bechtel BWXT, Lockheed-Martin Idaho Technology Company and Parsons Infrastructure and Technology Group for the OU 7-10 (Pit 9) and OU 7-13/14 IPP projects 1998 - 2004.

Advance Mixed Waste Treatment Project (AMWTP) - Provided industrial hygiene expertise to British Nuclear Fuels Ltd. (BNFL), Inc. for the \$400 million dollar Advance Mixed Waste Treatment Project (AMWTP) located at the DOE Idaho National Engineering and Environmental Laboratory (INEEL). Served as the consulting CIH for industrial safety and hygiene programs during the retrieval, treatment, and disposal of more than 65,000 cubic meters of transuranic (TRU) mixed waste at this CERCLA site. Project activities include large scale excavation of clean overburden soils, retrieval of 55-gallon drum, boxes, and other TRU stacked waste containers, chemical and radiological screening and assaying of each container, transportation to processing facility, and size reduction (compaction) of containers for final shipment to repository. Focus areas of technical support have included development of the personnel and area exposure assessments; sampling strategy for beryllium, heavy metals, silica, physical hazards; and oversight of the chronic beryllium disease prevention program (10 CFR 850). Additional support and oversight was provided in the areas of respiratory protection, atmospheric monitoring and testing, statistical analysis of exposure monitoring data, and supervision of staff industrial hygienists. Provided on-site management support services during DOE Operational Readiness Review (ORR) and follow-up DOE-HQ ORR verification to resolve technical issues related to exposure assessments.

Industrial Hygiene Laboratory Audit - Conducted comprehensive laboratory audit of DataChem Laboratories Industrial Hygiene laboratory facilities and procedures (Salt Lake City, UT Lab) for BNFL, Inc. Prepared audit criteria based on AIHA LQAP; DataChem SOPs, IHQAP, QAPP, 29 CFR 1910.1450, 10 CFR 20, and previous audit findings. Generated detailed summary report with findings, conditions adverse to quality, and recommendations.

In-Situ Grouting (ISG) Project Comprehensive Sampling – Conducted all geotechnical and chemical analysis sampling for the In-Situ Grouting (ISG) project demonstration at the INEEL RWMC. Sampling included all geotechnical cylinder (compressive strength) and rare earth tracer samples associated with the high pressure

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jet grouting of mock TRU waste forms at the RWMC. Samples were collected from the drill string, thrust blocks, drill string decontamination liquid, waste streams and high volume air samplers placed around the high pressure jet grouting rig to determine the extent and nature of potential TRU contamination via the rare earth tracers. Following a high pressure grout pump failure, participated in the DOE Type B investigation to determine the root and contributing causes focusing on the safety aspects.

INEEL CERCLA Disposal Facility Construction Health and Safety - Prepared Health and Safety Plan for the INEEL CERCLA Disposal Facility (ICDF) Operations. The HASP presented the systematic approach to identify and control ICDF operational hazards related to facility processes in accordance with 29 CFR 1910.120 (HAZWOPER) Treatment, Storage, and Disposal facility requirements.

Highly Flammable Material Sort, Segregate, Repackage, and Disposal Project - Conducted sorting, segregating, repackaging, and destructive preparation, and transportation activities for over 15,000 55-gallon drums of highly flammable nitrocellulose product at private client facility. Prepared Site-Specific Safety and Health Plan, conducted detailed project-specific hazard-based training for workers, established engineering controls, personal protective equipment requirements, and monitoring requirements to ensure worker protection during handling, storage transport, and sizing operations.

Pantex Burning Ground Characterization and Remediation Project - Served as the D&D radiological task manager and health and safety officer for the remediation of high explosive and radiologically contaminated soil area at the DOE Pantex Plant, Burning Grounds Site, Amarillo, TX. Provided all radiological services including conducting in-progress, post excavation, and confirmation surveys, then conducted all confirmation sampling in accordance with MARSIMS requirements. Approximately 300 yards of soil were excavated and loaded in roll-off bins for disposal within an expedited schedule resulting in early site closure.

In-Situ Grouting and In-Situ Vitrification Demonstration Projects – Prepared health and safety plans for the INEEL In Situ Grouting (ISG) and In-Situ Vitrification (ISV) project demonstrations at the Radioactive Waste Management Complex (RWMC).

Argonne West Cask Tunnel D&D Project - Developed industrial hygiene program and performed comprehensive air sampling and sound level evaluation in support of the Cask Tunnel D&D project located at the INEEL, Argonne West Facility. Air sampling was conducted for beryllium and respirable silica dusts and noise dosimetry/octave band analysis was performed during concrete and rock demolition tasks being conducted with a remotely operated hydraulic ram (Rubble Maker) to evaluate exposures.

Glovebox Fabrication Lead Brick Exposure Assessment - Performed air sampling and engineering control evaluation of glovebox lead brick cutting and fabrication facility.

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Compliance to lead standard (29 CFR 1910.1025) and respiratory protection standard (29 CFR 1910.134) was evaluated and ventilation system efficiency examined. Submitted comprehensive report with recommendation for improving engineering controls, work practices, and ventilation efficiency to reduce worker exposure.

Yuma Proving Ground Open Burn/Open Detonation Project - Wrote comprehensive health and safety plan for the OB/OD Burn Pad Soil Excavation project at the Department of the Army, Yuma Proving Ground (YPG), Yuma, AZ. Project involves excavation and characterization of soils areas contaminated with residue from explosives (TNT/high explosives) and propellant burning operations. This HASP included a comprehensive lead medical surveillance program and other specialized training requirements associated with YPG explosive site operations.

INEEL Construction Subcontractor Services - Provided full range of industrial hygiene and safety consulting services to INEEL construction subcontractors conducting facility upgrades, new facility construction, and D&D activities. Expertise in 29 CFR 1910 and 29 CFR 1926 regulatory requirements provided. Additional services have included, conducting exposure assessments, serving as competent person for excavation, consulting on substance-specific standards, and conducting full-period exposure monitoring for airborne contaminants such as metals, silica, asphalt fumes/emission constituents, and other organic compounds.

Expert Consultant and Witness Services - Provided expert consultant and witness industrial hygiene services and testimony for attorneys regarding exposure assessment and other health and safety related cases.

Corporate Health and Safety Director
S.M. Stoller Corporation
Boulder, CO - Idaho Falls, ID Office
February 1995 – December 1998

Wrote all corporate health, safety, and radiological programs; wrote and implemented health and safety plans for remediation and D&D projects; prepared technical proposals/costs/teaming arrangements; and represented Stoller at formal presentations for prospective contracts. Served as Corporate H&S technical manager for projects and offices throughout the U.S. and represented Stoller at national remediation and D&D conferences. While serving as the Corporate Health and Safety Director, Stoller had zero recordable injuries/illnesses and no lost time injuries even while conducting complex large scale excavation, remediation, and radiological D&D projects.

DOE Pantex Plant Remediation and Health and Safety Services - Served as the ES&H manager for two environmental remediation projects at the DOE Pantex Plant. HASPs were prepared for both the Accelerated Clean-up Activities (ACA) and Phase III of the D&D of Firing Site 5 projects. Additionally, all technical requirements for large scale excavations, radiological D&D, high explosives handling, and other hazards analysis were prepared for and approved by Pantex Environmental Restoration (ER)

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technical representatives. Served as the task manager for much of the Firing Site 5 characterization and D&D including, conducting NUREG radiological surveys, excavation of contaminated soils, and demolition of existing structures to meet unrestricted release criteria of DOE Order 5400.5 and MARSSIM site closure requirements.

Investigative-Derived Mixed Waste Sampling, Sorting, and Repackaging Project - Served as subcontractor project manager (PM) and FTL for waste management facilities investigative-derived waste (IDW) sampling and repackaging at the INEEL. Project involved characterization, sorting, lab packaging of low-level and mixed waste. Work was performed in airborne radioactivity areas in Level B protective equipment. More than 200 waste streams and 3,000 samples were sorted, treated, repackaged, and lab packed for shipment to on/off-site TSD facilities for further treatment and/or disposal. No contamination migration or events occurred due to excellent radiological control work practices and rigorous implementation of conduct of operations.

INEEL Waste Management Services - Served as subcontractor PM and FTL for several waste operations facility mixed waste projects. Projects included characterization of the ash following a critical burn campaign at the Waste Experimental Reduction Facility (WERF) and “decompaction” of a WERF low-level waste bin to locate and remove a mixed waste container and conduct characterization of the surrounding waste. Tasks were identified as “critical” by the contractor and DOE facility managers based on meeting regulatory milestones and involved direct regulator participation. These tasks were conducted in Level B PPE inside of high radiological contamination areas and airborne radioactivity areas. Both tasks were successfully accomplished in a timely manner with no contamination migration. This allowed WERF to restart operations with minimal down-time and meet regulatory milestones.

Rocky Flats Plant T-1 Trench Remediation Project - Provided technical support to Stoller team performing Level B protective equipment remediation and repackaging activities at T-1 Trench at the DOE Rocky Flats Plant, Golden, Colorado.

Pantex Firing Site 5 Radiological Characterization and D&D Project - Served as the Health and Safety Manager and assistant Project Manager for the DOE Pantex, Firing Site 5, Depleted Uranium cleanup project to meet DOE Order 5400.5 and MARSSIM site closure requirements. Wrote several health and safety plans for different phases of this project, developed job hazard analysis, and provided health, safety, and radiological oversight for all project tasks. This project required obtaining more than 250,000 radiological surface readings with board mounted radiation detectors and collecting of more than 1,000 surface and subsurface soil samples for analysis. Once the site was fully characterized, over 13,000 cubic feet of radiologically contaminated soils and fragments were excavated with trackhoes and the two remaining FS-5 structures (shot pad and concrete bunker) were surveyed contaminated concrete scabbled (18 ton shot pad removed), and remaining clean bunker structure demolished.

Pantex Plan High Explosive/Radiation Remediation Project - Served as the Health

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Safety Manager for the Pantex High Explosive/Radiation (HE/RAD) sites remediation project. Wrote all health and safety required documents including, health and safety plan, task hazard analysis, high explosive fragment handling procedures, decontamination plans, and site-specific training requirements. Project involved remediation of soils contaminated with high explosives (HDX, RDX, TNB and TNT) and heavy metals.

Pantex Plant Ditches ICM Remediation Project - Served as the Health and Safety Manager for the Pantex Ditches Interim Corrective Measures (ICM) remediation project. Wrote the health and safety plan, job hazard analysis, and related documentation for the work plan. More than 5,500 surface and subsurface soil samples were collected and over 22,000 separate analysis conducted by the on-site mobile analytical laboratory. Following contamination delineation, more than 400,000 cubic feet of contaminated soil was excavated at depths to 30+ feet and hauled from the sites for disposal at a hazardous waste landfill.

Legacy Waste Management Project - Served as a principal participant in the dispositioning of more than 1,845 legacy samples (in approximately four months) and 147,747 pounds of bulk legacy waste to the appropriate INEEL or off-site TSD facility as part of the technical team providing support to Lockheed-Martin's Environmental Restoration Department. Project included providing turn-key services to characterize/sort/package waste/samples, waste management, wrote hazardous waste determinations, entered all shipping data into the INEEL IWITS system, coordinated the shipment of legacy samples/waste, dispositioned samples back to the area of contamination, and creating close-out files to document each sample of waste "Lot" disposition action. Additionally, performed solidification of low-level waste streams using cement to stabilization prior to shipment to the RWMC facility in accordance with INEEL RRWAC requirements.

INEEL CFA OU 4-17 and OU 4-42 Site Characterization and Remediation Project - Served as the subcontractor project manager and field team leader (FTL) providing technical support services to Parsons Infrastructure and Technologies Group during the removal actions at the CFA OU 4-17/47 and OU 4-42 petroleum contaminated sites. Services included: conducting field screening of contaminated soils using PetroFlag™ immunoassay screening kits to provide "real time" evaluation of cleanup activities, writing SAP document revisions to meet changing field requirements, and preserving/packaging/shipping all samples to meet 48 hour analysis requirements. Additionally, collected over 100 laboratory confirmation samples ensure excavation of contaminated soil met the risk-based corrective action (RBCA) goals.

INEEL WAG 4 Comprehensive Remedial Investigation/Feasibility Study Project - INEEL Served as the subcontractor Project Manager (PM) and FTL for WAG 4 comprehensive RI/FS activity at INEEL. This project includes sampling of over 600 surface and subsurface soil locations using augering, drilling, and trenching methods to meet RI/FS data requirements. Analysis for hazardous and radiological analytes was conducted. Responsible for all aspects of drilling subcontracting, sample collection,

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packaging and shipment. Although the scope of work was increased by approximately 20% midway through the project, the project was still completed two weeks ahead of schedule and under the original budget.

CFA-04 Mercury Retort Sampling Project - Provided technical support to Parsons Infrastructure during the pumping and transport of 18,000 gallons of mercury contaminated water and sludge at the CFA-04 Mercury Retort site and direct field sampling support for characterization of (WAG 4) Time Critical Removal Action at the CFA-13, -15, -42, and -47 sites at the INEEL.

In-situ Grouting Soil Isolation Project - Served as the subcontractor project manager providing sampling/analysis support, laboratory statements of work development, waste management, health and safety support, and training services for the Soil Isolation Project (Cold Test Pit and Acid Pit) at the INEEL. A patented in-situ stabilization technology was used to inject high-pressure grout in buried waste to create a permanent stabilization form for radioactive/hazardous (mixed) waste located in the RWMC Acid Pit. Collected all contamination control samples including: high volume air samples, swipe samples of the drill string and thrust block surfaces, grout returns, project waste streams, decontamination water, and HEPA filter system. All samples were collected, preserved, packaged and shipped within the analytical holding times to one on-site and five off-site laboratories.

RWMC Acid Pit Sonic Drilling Project - Served as subcontract project manager for sonic drilling and coring of a Tech™ grout stabilized subsurface monolith at the INEEL Acid Pit (OU 7-13/14). The “Soilcrete” monolith was created using a high pressure jet grout injection method (described in project below) to stabilize subsurface metal, organic and radiological contaminants. Responsible for conducting all core logging, drill steel decontamination, characterization and subsampling of cores, packaging and shipping samples, and waste management tasks.

**Technical Leader, Industrial Hygiene
Lockheed-Martin Idaho Technologies Company (LMITCO)
Idaho Falls, Idaho
October 1994 -February 1995**

Directed staff of six industrial hygienists and three health and safety technicians supporting environmental restoration, waste management, and D&D activities at the INEEL. Managed department industrial hygiene programs and budgets, served as cognizant industrial hygiene professional on health all document review committees, LMITCO subject matter expert for (Hazardous Waste Operations and Emergency Response) HAZWOPER regulation ensuring federal/DOE regulatory compliance. Represented the INEEL at national hazardous waste conferences, DOE-HQ working groups, technical issue teams, and HAZWOPER committees. Served on ad hoc environmental safety and health committees, that developed “fast track” health and safety procedures as requested by executive management.

**Technical Leader, Industrial Hygiene
EG&G Idaho, Inc.
Idaho Falls, Idaho**

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February 1994 -October 1994

Same position description as with Lockheed-Martin Idaho Technologies Company above with the following additions: Drafted first model environmental restoration health and safety plan (HASP) used by the ER group and subcontractors for INEL RI/FS, RD/RA, and D&D projects. Developed/delivered ER and D&D hazard-specific HAZWOPER training course to workers, field team leaders, and project managers. Participated on DOE-HQ Chemical Vulnerability Assessment evaluating chemical vulnerabilities throughout the DOE complex. Wrote sections of final report and recommendation for mitigating potential chemical vulnerabilities.

Senior Engineer

Environmental Restoration & Waste Management Department (ER&WM)

EG&G Idaho, Inc.

March 1993 - February 1994

Idaho Falls, Idaho

Recognized, evaluated, and controlled all physical, chemical, and biological hazards resulting from ER and D&D activities at CERCLA sites on the INEEL. Conducted risk assessments of mixed hazardous waste (chemical/radiological) sites, designed engineering controls and process modifications, determined all personal protective equipment requirements for project tasks, developed strategies for state-of-the-art personnel and area monitoring in mixed waste environments, authored served as technical reviewer/editor for all project health and safety documentation, and approved work control documents (safe work, hot work, construction, etc.). Work directly supported included DD&D projects at the following facilities TAN (OU 1-04, 1-05, 1-10, RWMC, TRA, CCP (INTEC), ARA I/II/III, SPERT IV, PBF, and WAG 10 site-wide projects.

Director, Technical Services, Bioenvironmental Engineering

United States Air Force (USAF)

Whiteman Air Force Base, Missouri

January 1992 -March 1993

B-2 Stealth Bomber Industrial Hygiene Director - As the B-2 Stealth Bomber Program industrial hygiene director, reviewed Title I/II facility designs and conducted comprehensive occupational health evaluations of 20 new aircraft maintenance and support facilities housing 1,400 workers. Performed risk assessments on all hazardous processes and materials including unique B-2 bomber “skin” composite material exposures. Developed all exposure monitoring programs and provided medical surveillance recommendations to Aerospace Medicine Commander and ensured implementation of new engineering controls.

Base Radiation Safety Officer - As the base radiation safety officer, controlled all aspects of comprehensive base radiological protection program, conducted ionizing/non-ionizing radiation surveys (industrial/medical x-ray, special nuclear material, sealed sources, radar, and laser) and ensured compliance with two NRC radioactive material licenses. Established and managed base radiation protection program requirements

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(ALARA goals, training, etc), and monitored whole body/extremity and neutron doses of more than 50 radiation workers in 7 exposure areas.

Special Projects Manager - Served as Bioenvironmental Engineering unit advisor/trainer for industrial hygiene technical matters. Conducted risk assessments to identify reproductive hazards for all pregnant workers on base and provided duty restrictions to attending physician. Directed all high profile occupational incident/illness investigations (radon, radiation exposures, asbestos, indoor air quality, surgical suite HVAC problems/tuberculosis quarantines/bioaerosol issues, and carcinogenic aircraft composite studies).

**Director, Industrial Hygiene Section, Bioenvironmental Engineering
United States Air Force
Whiteman Air Force Base, Missouri
March 1991 - January 1992**

Planned, implemented, and monitored adequacy of comprehensive occupational health program supporting 90 industrial facilities, 40 missile launch sites, and 2 reserve bases. Scheduled and assigned workload for five industrial hygiene technicians. Coordinated all environmental and special projects studies (air, soil, water, noise, radiation, asbestos, ventilation). Managed several base programs including, respiratory protection, hazard communication, confined space, and radiation dosimetry. Served with occupational physician on Occupational Health Exposure Committee, which established medical surveillance and biological monitoring requirements for more than 3,000 workers. Reviewed plans and hazardous materials requests for environmental and health directives compliance, determined hazard codes for carcinogen product usage, handling/disposal requirements, evaluated engineering controls, and recommended personal and area monitoring.

**Manager, Industrial Hygiene Section, Bioenvironmental Engineering
United States Air Force
Spangdahlem Air Force Base, Germany
November 1987 - March 1991**

Industrial Hygiene Section Manager - Scheduled and prioritized industrial hygiene evaluations and special projects for 130 industrial facilities and 3 support bases. Assigned workload to four industrial hygiene technicians and managed human/technical resources to ensure its timely completion. Conducted special surveys and incident/accident investigations and wrote summary reports. Directed training and prepared technical references for base programs (asbestos, hazard communication, risk assessments, respiratory protection). Tracked environmental monitoring status on database and determined sampling priorities, strategies, and appropriate methods. Researched toxicology of highly hazardous products and found less toxic substitutes for use. Served on base disaster response team (aircraft/weapon accidents, chemical/fuel spills, and fire incidents). Negotiated with local German union representatives regarding use of protective equipment and exposure monitoring requirements.

Industrial Hygienist - Conducted baseline, annual, and special occupational health evaluations of aircraft fabrication/maintenance/launch, weapons, radar/communication,

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vehicle maintenance, allied construction, welding, and medical center facilities. Collected data, updated casefiles, and prepared summary reports for the unit flight surgeon and base medical director addressing engineering controls, protective equipment adequacy, chemical exposure risk assessments, ergonomics, and overall USAF, OSHA, and EPA directive compliance.

Emergency Response Team - Served as member of base emergency response team, which advised on-scene commander on establishing toxic corridors, health hazards, required protective equipment, and environmental impact from spills, aircraft accidents, weapon incidents, and special nuclear material loss or releases including determining radiation stay times, tracking radiological doses, and measuring fallout to establish radiation and contamination boundaries.

Wartime Duties - Wartime duties consisted of providing all nuclear, biological, and chemical (NBC) exposure monitoring to base commander and medical director during NATO and USAF Europe attacks in theater, 2nd echelon hospital, or deployed wartime location. Served on 2nd echelon hospital decontamination team decontaminating patients arriving at hospital, performed UXO sweeps following conventional warfare attacks, utilized chemical warfare agent monitoring kits following chemical attacks, and performed all radiological monitoring/stay-time calculations following nuclear device detonations or radioactive fallout.

Professional Development and Training

- More than 50 American Industrial Hygiene Association (AIHA) professional development courses (PDCs) (continuing education credits) for American Board of Industrial Hygiene (ABIH) certified Industrial Hygienist (CIH) certification maintenance in engineering have been completed since 1993 in the fields of construction safety, exposure modeling and exposure limit adjustment; remediation technology and methods; microbial investigations, sampling and remediation; legal and expert witness/testimony; Biosafety Level 3, and other industrial hygiene and safety related topics. A complete list of PDC courses completed is available upon request.
- DOE Radiological Worker II
- OSHA 40-Hour HAZWOPER (with 8-hour refresher courses)
- OSHA HAZWOPER Site Supervisor
- OSHA Confined Space Entrant/Attendant/Job Entry Supervisor
- Respirator Qualification Training (APR and supplied air)
- Medic 1st Aid/CPR
- Radiological Glovebag Installation/Inspection/Use
- Nuclear Criticality Safety
- DOE Conduct of Operations/Maintenance
- HAZMAT General Awareness (Sample Shipping)
- CERCLA/RCRA TAA and SAA Inspections

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- OSHA Institute - Indoor Air Quality Investigations
- Industrial Hygiene Advanced Topics, USAF School of Aerospace Medicine
- Radiological Health Physics Course, USAF School of Aerospace Medicine
- Bioenvironmental Engineering Technician Course, USAF School of Aerospace Medicine

Presenter and Instructor Courses

- Course Developer and Instructor: AIHA Professional Conference on Industrial Hygiene (PCIH) 2010, *WS-4 Mock Trial: Multi-employer Work Site*, Dallas, TX October 11, 2010.
- Arranger, Moderator, Presenter: American Industrial Hygiene Conference and Exhibition (AIHce 2009), Round Table - *249 Mock Trial: Liability Issues for the Industrial Hygienist*, June 4, 2009, Toronto, Canada.
- Presenter: AIHce 2008, Round Table - *209 Mock Trial: Meth Lab Cleanup*, June 2, 2008, Minneapolis, MN.
- Course Developer/Instructor: AIHA Teton Local Section Professional Development Conference, *OSHA Multi-Employer Worksite Compliance*, December 9, 2005, Idaho Falls, ID.
- Speaker: Advanced Perspectives in Mold Prevention & Control: *Crafting Professional Judgment for Assessment & Remediation Approaches to Varying Occupancies/ Building Types* (November 7-9, 2004 Riviera Hotel and Casino, Las Vegas, Nevada)
- Course Developer and Instructor: 2004 Idaho Governor's Health and Safety Conference *Mold Investigation and Remediation*, University of Idaho, Pocatello, ID.

Other Specialties/Experience

Extensive experienced in operation of multiple industrial hygiene, environmental, and radiological monitoring/sampling instruments and equipment.

- Air/Direct Reading: personal and area air samplers, multi-gas meters, PID, FID, IR, photo-acoustical analyzer, portable GC, aerosol, thermal anemometer (ventilation), optical and laser particle counters.
- Environmental Media Characterization: conductivity/turbidity/dissolved oxygen/pH meters, coliwasa, bailers, environmental immuno-assay/ kits, soil augers (split, core, sludge, tube), liquid sampling pumps.
- Radiological Instruments: *Ionizing Instruments* - ion chambers, GM, scintillation, proportional counters, panoramic survey meter, *Non-Ionizing instruments* - infrared, radio frequency, radar, laser energy measurement instrumentation.
- Physical Hazard Monitoring: Noise meters/dosimetry, heat stress (WBGT), ergonomic stressors, vibration, infrared thermoimaging.

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- Microbial Investigation/Sampling/Remediation: Culturable and nonculturable air sampling methodologies; collection of microbial specimens through direct tape lift, bulk sampling, dust collection; invasive inspection methods using borescopes, wall samplers; noninvasive inspection methods using non/penetrating moisture meters, infrared thermoimaging cameras, relative humidity measurements. Preparation of remedial specifications including establishing containment and decontamination areas, removal protocols, pre- and post-remedial sampling, and HVAC assessments.

Hardware and Software Capabilities

- Skilled in the use of Internet ES&H resources (toxicological registries and databases, exposure modeling, statistical exposure analysis, modeling, and program development)
- Proficient with various software packages (EXCEL, WORD, Power Point, ACCESS, exposure modeling) and their applications for occupational/environmental hygiene.

Professional Organizations

- Past Chair, Committee Member, American Industrial Hygiene Association (AIHA), Law Committee
- Past Chair, Member, AIHA Consultants Special Interest Group
- Committee Member, AIHA Indoor Environmental Quality Committee
- Past Committee Member, AIHA Environmental Affairs Committee
- Member, American Industrial Hygiene Association.

Security Clearance

Current investigation (inactive) Department of Energy (DOE) “Q” Clearance (equivalent to Department of Defense “Top Secret” Clearance),

Work History

2013 – Present: Health and Safety Services, LLC

2011 – 2013: North Wind Solutions, LLC

2009 – 2011: North Wind Group

2004 – 2009: North Wind, Inc.

1998 – 2004: Vortex Enterprises, Inc.

1995 - 1998 S.M. Stoller Corporation

1994 - 1995: Lockheed Martin Idaho Technologies Company

1993 - 1994: EG&G Idaho, Inc.

1991 - 1993: U.S. Air Force (USAF), Bioenvironmental Engineering, Whiteman Air Force Base, MO

1987 - 1991: USAF, Bioenvironmental Engineering, Spangdahlem Air Force Base, Germany

Publications

- DOE Report, "Chemical Safety Vulnerability Working Group Report," DOE/-0396P, September 1994 – as member of US DOE-HQ Chemical Safety Vulnerability Working Group.

CURRICULUM VITAE – BRUCE MILLER, M.S., CIH

- B.P. Miller, *Engineering Design File - OU 7-10 Staged Interim Action Phase II Respiratory Protection Requirements*, EDF-ER-171, July 6, 2000.
- Detailed and Standard Operating Technical Procedures (TPRs), project plans (PLNs), list (LST) documents, and Test Plans for DOE prime contractors at the INL.
- Numerous Health and Safety Plans for characterization, remediation, D&D, and treatment projects at DOE, DoD, BLM, and USACE facilities (see projects below).
- Sampling and Analysis Plans for private sector clients including matrices such as sand blasting media, hazardous sludges, petroleum contaminated soils, microbial, fungal, groundwater, etc.
- Numerous microbial investigation and remedial specification documents for microbial affected residential, commercial, and industrial structures.
- B.P. Miller, 1992, Central Missouri State University Library, Department of Safety Science and Technology Technical Reference, *Radiological Hazards: Evaluation and Control*.

Partial List - Health and Safety Plans

➤ Department of Energy Projects

- NWI-2411-001, “Health and Safety Plan for the Lower Limit of Detection Project,” Advanced Mixed Waste Treatment Facility, Idaho National Laboratory, October 2005.
- “Health and Safety Plan for the Cold Demonstration in Support Of In Situ TRU Waste Delineation and Waste Removal at the Hanford 218 and 618 Burial Grounds,” Department of Energy – Headquarters, Washington D.C., July 2005
- “Health and Safety Plan for the Kadlec Medical Center Building 748 Demolition,” Kadlec Medical Facility, Department of Energy, Hanford Operations Office, Richland, Washington, January 2005.
- “Site Specific Health and Safety Plan for The Manganese Stockpile Removal Project,” Defense Logistics Agency, Idaho National Laboratory, January 2005.
- Miller, B.P., “Health and Safety Plan for Waste Area Group 10 Track 2 Investigation of Sites CFA-54, MISC-45, and TRA-62,” ICP/EXT-05-00021, January 2005.
- Miller, B.P., “Health and Safety Plan for the V-Tanks Area CERCLA Site Remediation at Test Area North, Waste Area Group 1, Operable Unit 1-10,” ICP/EXT-04-00429, December 2004.
- Miller, B., “Health and Safety Plan for Los Alamos Site Office TA-73 Airport Landfill, NW-ID-2004-017, March 2004.
- Miller, B.P., “Health and Safety Plan for the Waste Area Group 10 Track II Investigation Sites,” INEEL/EXT-04-00120, February 2004.
- Miller, B.P., “Health and Safety Plan for the Waste Area Group 10 Remedial Actions at Trinitrotoluene and Royal Demolition Explosive-Contaminated Sites,” INEEL/EXT-03-00119, February 2004.
- Miller, B.P., Health and Safety Plan for the Vapor Vacuum Extraction with Treatment for the Organic Contamination in the Vadose Zone,” INEEL/EXT-03-00467, April 2003.
- Miller, B.P., “Health and Safety Plan for the VES-SFE-20 Hot Waste Tank,” INEEL/EXT-02-01436, December 2002.
- Miller, B.P., “Health and Safety Plan for the INEEL CERCAL Disposal Facility Operations,” INEEL/EXT-01-01318, August, 2002.

CURRICULUM VITAE – BRUCE MILLER, M.S., CIH

- Miller, B.P., “Environmental Restoration Model for Preparation of Site-Specific Health and Safety Plans”, Bechtel BWXT, Idaho, LLC, INEEL/INT-2002-00575, March 2002.
 - Miller, B.P., “Health and Safety Plan for the Waste Area Group 7 Routine Monitoring,” INEEL/EXT-01-01538, November 2001.
 - Miller, B.P., “Health and Safety Plan for INEEL CERCLA Disposal Facility Operations”, INEEL/EXT- INEEL/EXT-01-01318, October 2001.
 - Miller, B.P., “Health and Safety Plan for the OU 7-13/14 In Situ Grouting Treatability Study”, INEEL/EXT-2001-00766, July 2001.
 - Miller, B.P., “Health and Safety Plan for the Vapor Vacuum Extraction with Treatment for the Organic Contamination in the Vadose Zone at the Radioactive Waste Management Complex Operable Unit 7-08”, INEL-96/0119, Revision 5, January 2001.
 - Miller, B.P., “Health and Safety Plan for the OU 7-13/14 In Situ Vitrification Treatability Study Cold Test”, INEEL/EXT-2000-01430, January 2001.
 - Miller, B.P., “Health and Safety Plan for the Waste Area Group 7 Tracer Test at the Radioactive Waste Management Complex Subsurface Disposal Area”, INEEL/EXT-00-01428, December, 2000.
 - Miller, B.P., “Health and Safety Plan for the Waste Area Group 3, Operable Unit 3-14, Injection Well Drilling and Sampling Project”, INEEL/EXT-2000-00528, June, 2000.
 - Miller, B.P., “Health and Safety Plan for the Waste Area Group 3, Operable Unit 3-14, Tank Farm Soil Remedial Investigation”, INEEL/EXT-2000-00529, June, 2000.
 - Miller, B.P., “Health and Safety Plan for Sampling of the Test Reactor Area VCO 145 Sodium Hydroxide Container”, INEEL/EXT-2000-00699, May 2000.
 - Miller, B.P., “Health and Safety Plan for the 604/605 Soil Characterization Project”, INEEL/EXT-00-00432, February, 2000.
 - Miller, B.P., “Health and Safety Plan for the Waste Area Group 1 Post-Record of Decision Sampling”, INEEL/EXT-99-01045, October 1999.
 - Miller, B.P., “Health and Safety Plan for the Waste Area Group 4 Operable Unit 4-13B Monitoring Well Sampling”, INEEL/EXT-99-00864, September 1999.
 - Miller, B.P., “Health and Safety Plan for the Waste Area Group 1 Remedial Actions”, INEEL/EXT-99-00751, September 1999.
 - Miller, B.P., Health and Safety Plan for Well Installation and Sampling Outside the Radioactive Waste Management Complex Subsurface Disposal Area, INEEL/EXT-99-00527, August 1999.
 - Miller, B.P., “Health and Safety Plan for the Subsurface Disposal Area/Transuranic Disposal Area Well Drilling and Sampling Project”, INEEL/EXT-99-00923, June 1999.
 - Miller, B.P., “Health and Safety Plan for the Operable Unit 7-13/14 Subsurface Investigation”, INEEL/EXT-99-00857, May 1999.
 - Miller, B.P., “Health and Safety Plan for the Pit 9 Contingency Stage I Subsurface Investigation”, INEEL/EXT-98-00138, October 1998 (and revision 2, April, 1999).
 - Miller, B.P., “Health and Safety Plan for the Operable Unit 7-10 Contingency Project Stage I Cold Test”, INEEL/EXT-98-00570, August 1998.
 - Miller, B.P., “Environmental Restoration Model for Preparation of Task Specific Health and Safety Plans”, INEL-94/0060, November 1994.
- **U.S. Army Corps of Engineers Projects**
- Accident Prevention Plan for the Delineation, Characterization and Remediation of Contaminated Media at Stryker Brigade Cantonment Areas and FWA-102, Fort Wainwright, Alaska,” USACE, Alaska District, July 2006.

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- Site Safety and Health Plan for the Delineation, Characterization and Remediation of Contaminated Media at Stryker Brigade Cantonment Areas (Taku Garden), Fort Wainwright, Alaska,” USACE, Alaska District, July 2006.
- Site Safety and Health Plan for the Delineation, Characterization and Remediation of Contaminated Media at Stryker Brigade Cantonment Areas, Fort Wainwright, Alaska,” USACE, Alaska District, July 2006.
- Site Specific Health and Safety Plan for the Former Antigo Air Force Station Shallow Soils Remedial Action, Antigo, Wisconsin, NWI-ID-2006-003, USACE, Omaha District, January 2006.
- Site Safety and Health Plan and Accident Prevention Plan for the Remedial Investigation of Former Atlas “D” Missile Site 1, F.E. Warren Air Force Base, Laramie County, WY, USACE, Omaha District, July 2006.
- “Site Health and Safety Plan for the Delineation and Remediation of Contaminated Soil at Stryker Brigade Cantonment Area, Fort Wainwright, Alaska,” U. S. Army Corps of Engineers, Alaska District, August 2005
- “Site Health and Safety Plan for Solid Waste Management Unit (SWMU) 12/15 - Sanitary Waste Landfill and Pesticide Disposal Area,” Tooele Army Depot, Tooele, Utah, U. S. Army Corps of Engineers, Sacramento District, July 2005.
- “Site Safety and Health Plan for the Assessment of Petroleum and Metal Contaminated Soils at Various Locations within Alaska,” U. S. Army Corps of Engineers, Alaska District, July 2005
- “Site Specific Health and Safety Plan Operable Unit 5 Fort Wainwright Alaska”, U. S. Army Corps of Engineers, Alaska District, June 13, 2005.
- “Site-Specific Safety and Health Plan for Con/HTRW Removal at Tanaga Island and Ogluiga Island, Alaska, U. S. Army Corps of Engineers, Alaska District, May 2005
- Site Safety and Health Plan for the Assessment of Petroleum and Metal Contaminated Soils at Various Locations within Alaska, USACE, Alaska District, April 2005.
- “2004 Treatment and Operations Site-Specific Safety and Health Plan Operable Unit 2 Fort Wainwright Alaska”, U. S. Army Corps of Engineers, Alaska District, March 2004.
- “Landfill Site-Specific Safety and Health Plan for Operable Unit 4 Fort Wainwright, Alaska,” U. S. Army Corps of Engineers, Alaska District, May 2003
- “Site Specific Health and Safety Plan for the Remedial Action at SWMU 5 Building 600 Foundation, Drainage Pond, and Ditch Site, Deseret Chemical Depot, Tooele, Utah,” NW-ID-2003-017, February 2003.
- “Site Specific Health and Safety Plan Operable Unit 4 Fort Wainwright Alaska”, U. S. Army Corps of Engineers, Alaska District, June 2002.
- “Site Specific Health and Safety Plan Operable Unit 2 and 5 Fort Wainwright Alaska”, U. S. Army Corps of Engineers, Alaska District, June 2002.
- “Site Specific Health and Safety Plan for SWMU 25 Remedial Action of Former Battery Shop”, U. S. Army Corps of Engineers, Sacramento District, Tooele Army Depot Tooele, Utah, December 2001.
- “Site Specific Health and Safety Plan for Remedial Action of SWMU 54, Building 611 Sandblast Area and the SWMU 46, Building 611 Site”, U. S. Army Corps of Engineers, Sacramento District, Tooele Army Depot Tooele, Utah, September 2001.
- “Site Specific Health and Safety Plan for SWMU 49 Remedial Action G Avenue Stormwater and Industrial Wastewater Piping and Outfall”, U. S. Army Corps of Engineers, Sacramento District, Tooele Army Depot Tooele, Utah, September 2001.
- “Site Specific Safety and Health Plan for SWMU 46 Remedial Action of Used Oil Dumpsters”, U. S. Army Corps of Engineers, Sacramento District, Tooele Army Depot Tooele, Utah, August 2001.

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➤ **Bureau of Land Management, Forest Service, Bureau of Indian Affairs Projects**

- “Site Specific Health and Safety Plan for the Manning Canyon Mine Tailing Remediation Project,” Bureau of Land Management, September 2005.
- Shungnak Site Assessment Site Safety and Health Plan, Bureau of Indian Affairs, Alaska Region, Shungnak, Alaska, October 2004.
- “Site Specific Health and Safety Plan for the Idaho Lakeview Mine Project,” U.S. Forest Service, August 2004,
- “Site Specific Health and Safety Plan for the Murtaugh Landfill Drilling and Monitoring System Installation,” September 2003.
- “Site Specific Health and Safety Plan for the Big Ox Mill Site,” June 10, 2003.
- “Site Specific Health and Safety Plan for the Upper Constitution Water Treatment System Design/Build,” October 20, 2002.
- “Site Specific Health and Safety Plan for the Nabob Mill Tailings Groundwater Diversion System Design/Build”, Bureau of Land Management, October 10, 2002
- “Site Specific Health and Safety Plan for the Lava Creek AML Sampling, Removal, and Rehabilitation Project” Bureau of Land Management, September 21, 2002
- “Site Specific Health and Safety Plan for the Menan Butte Asbestos Pipe Removal Project”, Bureau of Land Management, September 12, 2002
- “Site Specific Health and Safety Plan for the Twin Peaks Removal Action”, Bureau of Land Management, February 15, 2002.
- “Site Specific Health and Safety Plan for the Upper Snake River District Offices Combined Chemical Removal Actions”, Bureau of Land Management, December 8, 2001.
- “Site Specific Health and Safety Plan for the Currier Gulch Regrading/Reseeding”, Bureau of Land Management, October 27, 2001.
- “Site Specific Health and Safety Plan for the Moran Tunnel Maintenance Construction Actions”, Bureau of Land Management, October 25, 2001.
- “Site Specific Health and Safety Plan for the Cloward Crossing and Pass Creek Dump Removals”, Bureau of Land Management, October 19, 2001.
- “Site Specific Health and Safety Plan for the Silverton Site Tailing Removal and Soil Sampling Evaluation”, Bureau of Land Management, October 16, 2001.
- “Site Specific Health and Safety Plan for the Goldback and Motherlode Rock Dump Removal Action”, Bureau of Land Management, October 3, 2001.

➤ **Department of Defense and Private Client Projects**

- “Phase II RCRA Facility Investigation Health And Safety Plan For Site AOC R (SS43) Charleston Air Force Base, South Carolina,” United States Air Force, October 2005.
- “Site Specific Health and Safety Plan for Hurricane Katrina Damage Repairs (Plan A) for Buildings 3101, 3821, 3823, 3501, 4605, Fishing Piers, and Grounds Restoration,” Keesler AFB, Mississippi, United States Air Force, October 2005.
- “Site Specific Health and Safety Plan for Hurricane Katrina Damage Repairs (Plan B) for Marina Facilities, Buildings 6726 and 6737 Restoration,” Keesler AFB, Mississippi, United States Air Force, October 2005.
- “Site Specific Health and Safety Plan for Cleanup of Tank 1A JP-8 Fuel Release,” Mountain Home AFB, Idaho, United States Air Force, September 2005.
- “Site Specific Health and Safety Plan for Repair of Air Force Special Operations Command (AFSOC) Annex, Building 90333,” Hurlburt Field, Florida, United States Air Force, August 2005.

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- “Site Specific Health and Safety Plan for Construction of the Marina Operations Building and Fuel Supply System,” Hurlburt Field, Florida, United States Air Force, August 2005.
- “Site Specific Health and Safety Plan for the Repair and Upgrade of the Waste Water Treatment Plant,” Hurlburt Field, Florida, United States Air Force, July 2005.
- “Site Specific Health and Safety Plan for Bridge Construction on Whitbeck Street, Hurlburt Field, Florida,” United States Air Force, July 2005.
- “Health and Safety Plan for the RCRA Facility Investigation Phase III,” White Sands Missile Range, NM, January 2004.
- “Site Specific Health and Safety Plan Construction of Junior Non-Commissioned Housing Fort Wainwright, Alaska,” February 2004.
- “Site Specific Health and Safety Plan for the Site 10, Rubble Disposal Area Naval Radio Receiver Facility Naval Computer and Telecommunications Station Imperial Beach, California”, Department of the Navy, May 2002.
- “Site Specific Safety and Health Plan FY02 Dormitory Elmendorf Air Force Base”, Department of the Air Force, Anchorage, Alaska, April 2002.
- “Site-Specific Health and Safety Plan for the Inventory Reduction of Bulk Nitrocellulose Project”, (Private Client) East Camden, Arkansas, February, 2002.
- “Site Specific Health And Safety Plan Groundwater Monitoring Project Hazardous Waste Landfill/Enhanced Hazardous Waste Landfill”, Rocky Mountain Arsenal, October 2001.
- Miller, B.P., “Site-Specific Health and Safety Plan for the North OB/OD Burn Pad Soil Excavation Project”, Yuma Proving Ground, December 1999.