



PROFESSIONAL PROFILE



William S. Muñoz, PE, PG

Principal Engineer | Operations Manager

EXPERIENCE SUMMARY

Mr. Muñoz is a registered Professional Engineer and Professional Geologist with more than 30 years' experience in the civil, environmental, and earth sciences fields. He has also completed ISO 14001 and 45001 Lead Auditor training. Mr. Muñoz teams with clients to provide solutions that are technically sound, but also bring value. His past experience includes Technical Director at BSI America Professional Services Inc. (2017-2022), National Environmental Services Practice Line Leader (2014-2017) and Business Unit Manager (2012-2014) at Bureau Veritas North America, Inc., additional experience with Bureau Veritas/Clayton Group (1994-2012), Senior Engineer at Cerenzio & Panaro, P.C. (1991-1994), Senior Geologist at Johnson Engineering, Inc. (1996-1998), Engineering Aide at John Lehman, P.E., P.C. (1995-1996), and Technician at Testwell Craig Laboratories (1994-1995).

TECHNICAL SPECIALTIES

Mr. Muñoz's strong technical background is an asset for the diverse services he provides, including project management, site development/decommissioning, inspections, assessments, investigations, remediation, design, site closures, permitting, plan development, reporting, and conformance assessments. Over his career, he has worked with a broad range of clients, including oil and gas, chemical manufacturing, automotive, and real estate.

REPRESENTATIVE PROJECTS

- Project Director to drive efforts to minimize client liability associated with environmental impacts. Lead the development of a site-specific groundwater quality objective for the most abundant contaminant (a chlorinated solvent) at a site. The site-specific objective was accepted by state regulators. This achievement reduced the projected remediation activities to limited in situ treatment and groundwater monitoring. This resulted in an estimated cost saving of approximately 85% when compared to the groundwater pump-and-treatment option proposed prior to obtaining the site-specific groundwater quality objective.
- Aviation Disaster Response Lead. Directed remediation activities associated with the crash of a commercial jet in a residential setting. Worked closely with the client and public relations personnel to ensure that issues were promptly addressed, and that timely and accurate information was provided to residents, property owners, and the public. The area was quickly remediated, converted to a park, and returned to the community.
- Radiological Assessment Manager. Served as the client point of contact and manager for an assessment of radiological impacts to a combined sewer system in a major US city. An abandoned facility once processed radioactive Monazite sand. The radioactive sand was found in the combined sewer near the facility. Responsibilities included managing the team of professionals that developed and implemented an extensive list of safety plans, sampling plans, quality assurance/quality control documents, etc., as well as the final report presenting the results of the investigation. The client gave accolades for the execution of the project and resulting report, especially in light of the project's high visibility, sensitivity, and aggressive schedule mandated by regulatory agencies.
- Conformance Assessment Director. Served as manager and client point of contact for a high-profile conformity assessment. The reputation and brand of the client had been affected due to its operational impacts upon the environment, living conditions, and economy of the local population. The issue received international attention from the media, NGOs, communities, and others. The assessment and transparent presentation of observations facilitated acceptance of findings by the stakeholders. The client used these findings to improve the

CONTACT INFORMATION

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EDUCATION

MS, Environmental Engineering,
New Jersey Institute of
Technology
BS, Geology, Bowling Green
State University

PROFESSIONAL LICENSES

Professional Engineer: CT, DC,
DE, GA, GU, HI, IN, LA, MA, MD,
ME, MO, NC, NH, NJ, NY, OK,
PA, SC, SD, VA, VT, WA & WV
Professional Geologist: PA & TX

systems, demonstrate its commitment to protecting the environment and local communities, and repair its brand reputation.

- Project Manager. Responsible for efficiently differentiating site conditions from regional groundwater impacts that contained similar chlorinated solvents. This significantly reduced the client's liability, project cost, and implementation schedule. The evaluation of remediation options included compliance with regulations, technical feasibility, potential impact on adjacent residential properties, facility operational disruptions, schedule, and cost. The selected remediation included in situ treatment of the contaminants along with a groundwater monitoring program to confirm the performance.
- Project Manager. Obtained regulatory approval of remedial action plans, along with all supporting State and local permits, to address impacted sediment in a stormwater holding pond, and ephemeral stream and wetlands. Selected impacted sediments in the wetlands were removed. Others were covered with a geomembrane. A pipe was then installed over the membrane to convey stormwater through the area. Conveying stormwater in the pipe further reduced the risk associated with runoff potentiating entraining impacted sediment and depositing it over previously affected areas. The impacts associated with the remedial measures were offset by wetlands enhancements, including vernal pools.
- Transition Health, Safety, and Environmental (HSE) Manager for aerospace facility. Served as Regional EHS manager for the transition of operations for two major aerospace manufacturing facilities covering a combined 2M square feet. During the 18-month tenure at the facilities, managed a staff of EHS professionals and a budget of more than \$10 million. The client presented an award to recognize the outstanding contribution to the successful transition of facility operations.
- Mr. Muñoz modified a remedial investigation work plan to reduce the client's implementation costs while meeting regulatory requirements. He supervised monitoring well installation and sampling, soil sample collection, and field screening using immunoassay kits, and the sampling of stream sediments, pond sediments, and surface water bodies. Under his direction, the project team evaluated the integrity of piping and other subsurface structures using video cameras to locate structural breaches. Each pipe breach was assessed to determine its impact on the environment. Mr. Muñoz evaluated these results, compared them with the appropriate cleanup criteria, and formed the basis for identifying the most cost-effective remediation option. Constituents of concern included petroleum products and polychlorinated biphenyls (PCBs) in the soil and solvents in the groundwater. Remedial options implemented at the Site include a Groundwater Classification

Exception Area, capping most of the site to protect workers and the environment from the constituents of concern, and removing the most impacted soil for disposal. Mr. Muñoz also directed the collection and disposal of wastes generated during these activities.

- Project Engineer. Prepared and reviewed Spill Prevention Control and Countermeasure (SPCC) and Stormwater Pollution Prevention Plans (SWPPPs) for sites with operations ranging from mining to warehouse distribution at locations throughout the eastern United States.
- Groundwater Remediation. Mr. Muñoz managed the design of a groundwater remediation system and obtained an expeditious approval of the design by the local municipality and the New York State Department of Environmental Conservation (NYSDEC). He also worked with his team of professionals to develop site safety and other planning documents. The resulting treatment system met the design requirements, including a cost-effective and aesthetically pleasing method to effectively treat and dispose of groundwater. The treatment system performed so effectively that state regulators have requested authorization to bring other state and federal environmental officials to the site to encourage them to consider the design for use in similar sites.
- Soil Vapor Investigation. Mr. Muñoz developed a Soil Vapor Site Investigation Work Plan (SV SIWP) that was subsequently approved by the New York State Courts Electronic Filing System (NYSCEF) and the Department of Health (DOH). The SV SIWP assessed the impact of chlorinated solvents in the sub surface. The Site was a manufacturing facility, surrounded by residential development. Existing soil and groundwater data were reviewed and used to guide development of the soil vapor work plan. Sampling was limited to the Site, avoiding issues associated with accessing the adjacent properties. The plan was approved by the agencies and implemented. The results demonstrated that concentrations of the subject compounds were not anticipated to pose an actionable impact to the adjacent properties and potential on-site impacts could be managed with the implementation of a sub-slab ventilation system.
- Site Investigations. Mr. Muñoz managed the preparation of site investigation workplans, quality assurance/quality control plans, and sampling plan for a major electrical utility. The investigation, remediation, and subsequent reports were reviewed and approved by the NYSDEC. The investigations addressed soil and groundwater impacts attributed to the subsurface fuel and dielectric oil transmission lines located beneath city streets. The approved workplans were implemented and remediation was conducted where appropriate. Mr. Muñoz's responsibilities included

management of field personnel, permitting, drilling contractors, and laboratories. Team responsibilities included preliminary site walks, utility mark outs, traffic control plans, soil and groundwater sampling, well installation, community air monitoring programs (CAMPs), data usability summary reports (DUSRs), site restoration, and report preparation. Closure reports were prepared based on the results of field investigations and remediation. Mr. Muñoz's team submitted requests for closure of over 30 spills. Each spill received a determination of No Further Action (closure) status from the NYSDEC.

- Project Manager. Provided environmental consulting services associated with the construction and permitting of a five-mile wastewater force main. Services included feasibility evaluation of proposed routes and permitting associated with the preferred route. Issues included wetland, stream encroachment, and threatened and endangered species.
- Director. Environmental, Health, and Safety (EHS) response to mercury release in a residential area. The release occurred near an apartment building and numerous underground utilities that were a potential conduit for the migration of impacts. Responsibilities included working with teams of environmental and hygiene professionals to ensure protection of the environment and public health in accordance with the

applicable regulations. Responsibilities also consisted of meeting with the regulators, supervising the preparation and implementation of site-specific plans, obtaining permits, approvals, etc. Working closely with the regulators facilitated meeting the project goals and quickly brought the Site to closure.

- Environmental Compliance Manual Project Manager. Served as client point of contact for a program that prepared 27 Environmental Compliance Manuals (ECMs) for power generation facilities located in the US, Canada, and Mexico. Fuels used at the facilities consisted of natural gas, coal, biomass, wind power, and supplemental biomass fuels. Responsibilities included management of the multi-lingual team of professionals, achieving project milestones and reviewing the ECMs to ensure consistency and quality. The team accomplished the goal of providing each facility with a comprehensive yet streamlined manual, that facilitates the operation of the facility in accordance with federal, state, and local permits and regulations.

PROFESSIONAL TRAININGS

ISO 14001 & 45001 Lead Auditor Trained

New Jersey Underground Storage Tank: Installation, Removal, Cathodic Protection