
FIELDS OF COMPETENCE

- Environmental field activities including soil, groundwater, sediment, and surface water sampling, Phase I and Phase II environmental site assessments, and compliance inspections for Clients in a variety of industries.
- Third Party Quality Assurance oversights and audits to ensure compliance with project, state and federal regulations of Client subcontractors performing environmental sampling of various media (soil, surface water, groundwater, sediment and air), contaminated soil remediation, contaminated structures demolition, groundwater well installation, geotechnical testing, concrete installation and testing, geosynthetic liner installation, and hazardous waste landfill cap construction.
- Facility inspections for compliance with 40 CFR Part 136 (SPCC Rule), drafting of Spill Prevention and Counter Control measures and Oil Spill Contingency plans.
- Wetland Delineation in accordance with USACE Guidance.
- Coordinating cost effective solutions to technical problems identified in the field to ensure compliance with project quality standards.
- Managing field personnel to schedule necessary daily and periodic inspections to comply with strict quality requirements.
- Trimble Global Positioning System (GPS) System and AutoCAD software.

CREDENTIALS

B.S., Environmental Science-concentration Biology, University of Tennessee at Chattanooga, 1996.

CERTIFICATION

- Completed 40-Hour OSHA Hazardous Waste Health and Safety Training, 2001.
- Completed 30-Hour OSHA Construction Safety, 2008.
- Completed 8-Hour OSHA Supervisor Training, 2008.
- Completed 8-Hour OSHA Refresher Training, current.
- Completed 10-Hour OSHA Construction Safety, 2005.
- Completed US Army Corps of Engineers Construction Quality Management for Contractors Training, 2009.
- Completed Trenching and Excavation Competent Person, 2004.

SUMMARY OF EXPERIENCE

Mr. Gruzalski has 15 years of experience in the environmental field with expertise in Environmental Sampling, Quality Assurance/Quality Control, Field Engineering, Health and Safety, remediation design and implementation, technical writing, and document development.

Mr. Gruzalski's professional experience includes collection of environmental samples for compliance and remediation projects; third party quality assurance oversights of various aspects of environmental projects; drafting technical documents to meet state and federal regulatory requirements; analyzing analytical, geotechnical and agronomic data; preparing and responding to request for proposals; coordinating with project personnel to overcome challenges in the field without compromising the quality of work; and defining acceptable, cost effective solutions to technical problems.

Mr. Gruzalski has extensive experience in providing third party quality assurance oversights and audits to ensure compliance with project



requirements, to increase data defensibility for projects with potential litigation, and to assist Clients in effectively managing their subcontractors.

Other experience includes developing design analysis, technical specifications, and project drawings and providing feedback on other components of design packages.

From 2005 to 2009, he successfully developed the Borrow Area Management Plan, authored the Recovered Chemical Warfare and Munitions and Explosives of Concern Hazard Evaluation and the Chemical Agent Material Screening Plan identifying potential exposure hazards. He worked closely during this time with the Engineer of Record in the development of the Design Analysis, Technical Specification and Project Drawings. On-going communication, coordination, and comment resolution with the Client as well as local and Federal RAs were essential to gaining acceptance of the design.

KEY PROJECTS

- Performance of baseline environmental assessments for oil and gas clients to support exploration and upstream production. Tasks include field reconnaissance to identify potential at-risk natural resources, multi-agency record and document searches, coordination with state and local agencies, development of sampling and analysis plans, collection of environmental samples and wetland delineations.
- Drafting SPCC plans for oil and gas clients to ensure compliance with 40 CFR 136 Part 112. Clients include Magnum Hunter Production, Miller Energy and Tenngasco. Tasks include field reconnaissance, measurements and evaluation of site spill control measures, calculation of containment capacity and overland flow rates, development of above ground storage tank inspection requirements/checklists, and development of flowline inspection requirements/checklists.
- A member of the third-party quality assurance team for the Tennessee Valley Authority

(TVA) Kingston, Tennessee Fly Ash Recovery Project. Responsibilities included field auditing during soil, sediment, surface water, groundwater, biological, waste sampling, and air monitoring activities; preparation of guidance documents (sampling plans and standard operating procedures); assistance with coordination of sampling plan implementation and reporting activities.

- A member of the third-party quality assurance team for the British Petroleum (BP) Spill Response in the Gulf of Mexico. Responsibilities: included field auditing during on-shore soil and waste sampling and off-shore voyages during sediment sampling.
- Environmental and Safety Supervisor ensuring compliance with project health and safety requirements and project environmental compliance requirements at an OSHA Voluntary Protection Program site.
- Participated in the Shell Disposal Trenches, Basin A and Section 36 Balance of Areas Subgrade Construction, RMA Structures Demolition and Removal Project Phase 2, Section 36 Balance of Areas and Deep Acute Excavation Areas at the Rocky Mountain Arsenal, Commerce City, Colorado.
- Participated in the Rocky Mountain Arsenal, Commerce City, Colorado Section 35 Secondary Basins and Basin F Exterior as waste tracker. QA of Project Technical specifications; coordinated transportation, delivery and disposal of remediation waste.
- Waste tracking specialist and quality control oversight of remediation subcontractor; quality assurance of project technical specifications; coordination of transportation, delivery and disposal of remediation waste to proper disposal facility; record and document information of each waste load leaving the project and providing communication between disposal facility and remediation site at the Rocky Mountain Arsenal, Commerce City, Colorado.
- Integrated Cover System Design Resource Conservation and Recovery Act-Equivalent



Equivalent Cover Construction Project, Design and Field Implementation at the Rocky Mountain Arsenal, Commerce City, Colorado.

- Participated in the Shell Disposal Trenches Remediation Project Resource Conservation and Recovery Act-Equivalent Equivalent Cover Construction Project, Design, and Field Implementation located in Commerce City, Colorado.
- Wildlife technician tasked with the humane capture and relocation of black tailed prairie dogs. Responsibilities included community surveys, behavioral studies, capture of targeted species, habitat construction/ restoration and relocation.

PRESENTATIONS/PAPERS

Gruzalski J.G., et al. 2016. "Pore Water Collection, Analysis and Evaluation. The Need for Standardization." *Reviews of Environmental Contamination and Toxicology*. Vol. 237.

Markwiese J.T., et al. 2014. Monitoring the Natural Attenuation of Coal Combustion Waste in River Sediments. *Environmental Monitoring and Assessment*. (online version <http://link.springer.com/article/10.1007/s10661-014-3772-z>)

Gruzalski, J., J. Markwiese, R. Vitale, W. Rogers, N. Carriker, D. Thal. "Porewater Collection and Risk Evaluation." SETAC North America 34th Annual Meeting, Nashville, TN, November 2013.

Gruzalski, J. "Remedial Action Decisions Based on Porewater Analysis." Tennessee Solid/Hazardous Waste Conference & Exhibition, Gatlinburg, TN, April 2013.

Gruzalski, J. "Regulatory Acceptable Alternatives to RCRA Covers." Tennessee Solid/Hazardous Waste Conference, Gatlinburg, TN, April 25, 2012.

Vitale, R. J., R. L. Forman, J. N. Gable, E. E. Rodgers, J. Gruzalski, et. al. "Implementation of a Field and Laboratory Quality Oversight Program During the TVA Kingston Fly Ash Recovery Project to Ensure High Quality and Defensible Data." TVA-Kingston Fly Ash Release Environmental Research Symposium, Harriman, TN, August 2-3, 2011.

Rogers, W. J., R. J. Vitale, J. N. Gable, E. E. Rodgers, J. Gruzalski, and N. E. Carriker. "Observations of Metals and Metaloids in Sediment Porewater Associated with the Tennessee Valley Authority, Kingston, TN Ash Recovery." TVA-Kingston Fly Ash Release Environmental Research Symposium, Harriman, TN, August 2-3, 2011.

Gruzalski J.G., Markwiese J.T., Carriker N.E., Rogers W.J., Vitale R.J., Thal D.I. "Pore Water Collection, Analysis and Evaluation. The Need for Standardization." *Reviews of Environmental Contamination and Toxicology*. Vol. 237 (2016).

Professional Profile

Jacob Gruzalski Project Geoscientist

Phone: 865.376.7590

E-mail: jgruzalski@envstd.com



Professional Experience

Mr. Gruzalski has 14 years of experience in the environmental field with expertise in environmental sampling (program design and sample collection), Quality Assurance/Quality Control, Health and Safety, construction and field engineering, remediation design and implementation, technical writing, and document development; he joined Environmental Standards in 2010.

Mr. Gruzalski has extensive experience in performing oversight of remediation subcontractors to ensure compliance with project health and safety requirements, project engineering technical specifications, project material testing requirements and project environmental compliance requirements. These duties were performed on an OSHA Voluntary Protection Program site as an Environmental and Safety Supervisor.

Mr. Gruzalski's upstream oil and gas experience includes developing Spill Prevention and Control and Countermeasures (SPCC) plans that meet US EPA regulatory requirements for on-shore oil production facilities and the design and implementation of due diligence Environmental Baseline Studies (EBS) for exploration and production sites to identify potential existing environmental impacts and perform EBS sampling. Elements of the EBS programs include wetland delineation, developing and implementing sampling plans and EBS reports.

Mr. Gruzalski's professional experience also includes developing and implementing Quality Assurance programs for environmental programs that focus on the quality and defensibility of analytical data, geotechnical and agronomic data evaluation; Phase 1 and Phase 2 environmental assessments; and developing design analysis, technical specifications, and project drawings for complex remediation projects.

Credentials

40-Hour OSHA Hazardous Waste Health and Safety Training, 2001.

30-Hour OSHA Construction Safety, 2008.

8-Hour OSHA Supervisor Training, 2008.

8-Hour OSHA Refresher Training, current.

10-Hour OSHA Construction Safety, 2005.

US Army Corps of Engineers Construction Quality Management for Contractors Training, 2009.

Trenching and Excavation Safety, 2004.

Visual Determination of Opacity of Emissions from Stationary Sources Training, 2015.

Education

Mr. Gruzalski received a Bachelor of Science in Environmental Science, with a concentration in Biology, from University of Tennessee at Chattanooga in 1996.