

OIL AND GAS

Supporting a dynamic industry through innovative and attentive advising.



There is no typical day in the oil and gas industry. Things can change overnight – and often do. Leaders in the industry must make decisions to meet changing energy demands and worldwide political activities while under the scrutiny of the media, stakeholder groups, the general public and politicians. *Our chemical, civil, and process engineers, many of them former oil and gas industry professionals, understand the petroleum business and the intricacies of operational characteristics.* Our experience with upstream, midstream, and downstream companies has led to sustainable cost-saving solutions related to water, wastewater, environmental compliance and/or remediation, and process engineering.

Chemical / Process Engineering

If your business manufactures products, refines petroleum, or produces chemicals, you will benefit from our chemical/ process engineering services. We focus on applying chemical and environmental engineering principles to optimize and debottleneck processes allowing them to perform more efficiently. From concept to completion, we save clients time and money with process evaluation, conceptual and basic process design, basic engineering packages, process control strategies and safety management, operations support services, third-party evaluation and oversight, and environmental compliance support.

Water Resources Consulting and Engineering

We understand the water balance requirements of facilities and develop plans and designs that optimize facility water needs. By assessing the mass water balances and relating our findings to equipment and other variables, we have saved clients millions of dollars for water use, energy, and treatment activities.

Environmental Engineering

Our daily challenge is to create resilient, sustainable, realworld engineered solutions for processing operations, infrastructure design, power delivery systems, and environmental regulatory issues. We assist in planning, evaluating, diagnosing, and mitigating environmental issues regardless of project scale. Our experts will work by your side to optimize operations, control cost, and enhance environmental performance and stewardship.

Civil Engineering

This is the founding platform of Guernsey. Our current civil engineering skills reflect upon our very first days in 1928. Though technology and processes are different today than they were then, one thing that hasn't changed is the value of a team that knows the intricacies of successful projects at every level. Our understanding of infrastructure requirements is extensive and allows us to effectively assess conditions and provide solutions. Our previous experience in the oil & gas industry provides exceptional insight.









Permitting / Regulatory Compliance

When the job requires ensuring regulatory compliance and obtaining permits, you need a team who has been in the field, observed all sides of the issues, and sustained a proven record of regulatory agency interaction. Our engineers, planners, and scientists are your advocates for environmental compliance relating to facilities, programs and permitting activities relating to air, water, land, solid waste, and hazardous materials/wastes.

Our efforts to minimize client exposure to challenges under the Clean Water Act includes assessing and controlling discharges to receiving streams, regulatory issues involving NPDES permits, Section 404 permits, and the development of Storm Water Pollution Prevention Plans (SWPPP) and Spill Prevention Control and Countermeasure (SPCC) Plans. We assist our clients in evaluating downstream processes to optimize and improve primary and secondary wastewater processes to target discharges within permitted limits.

Additionally, we perform environmental audits of both programs and facilities locally, regionally, or worldwide. These audits evaluate environmental programs, compliance activities, and develop long-range plans to affect environmental stewardship.

Environmental Investigations, Studies, and Clearances

We deliver comprehensive expertise across a broad range of environmental services: Phase I environmental site assessments for due diligence, threatened and endangered species surveys, cultural resources surveys, and remedial actions for hazardous materials/wastes. Responses to and coordination with environmental regulators streamline our completion of multi-media regulatory compliance audits, Phase II/III site assessments, hazardous materials surveys, soil and groundwater investigations, site characterizations, and remedial action oversight. Additionally, we maintain the ability to address comprehensive environmental requirements that might involve activities relating to compliance with the National Environmental Policy Act (NEPA) in association with various federal and state regulations.

Expert Witness / Testimony

Expert testimony requires experienced, recognized and articulate professionals with credibility in a specific technical discipline to enhance a contested case. This describes our engineering, analytical/business management and environmental personnel to a "T". We not only provide efficient and effective representatives for our clients, we also assist with technical research, evaluation, documentation and presentation of information.

Program Management / Owner's Engineer

Our comprehensive understanding of structured and engineered systems enables us to oversee the progression of your project from concept through construction. We assign a program manager to a project to enhance project status, provide decision-making skills and develop a program perspective as required. This may also include identifying and managing cross-project dependencies, risks, issues, requirements, designs, and solutions. Program managers are not necessarily discipline-specific and can include planners, engineers, architects, scientists, or other experts who demonstrate exceptional organization, discipline, and control, and possess the skills to communicate across levels.

Cyber Security

A solid security strategy takes more than software and an occasional checkup. You need a team of good guys who are trained to think like the bad guys. That's where our cyber security professionals come in. We have nationally-accredited information security experts whose sole focus is to help our clients meet their risk management goals and compliance obligations using risk management, regulatory support, (NERC CIP, PCI-DSS, and HIPAA), security and vulnerability reviews, security monitoring, training and awareness, program audits and incident response planning.









Vertical Construction

Our vertical construction design team helps with everything from the creation of new campuses to the renovation of existing facilities. We solve operational and functional challenges through creative, integrated design. Our team works with owners and project/technical managers to develop the appropriate design solutions while maintaining sharp focus on schedule and budget.

We understand the needs of the oil and gas industry and the facilities required not only for effective operations but also for enhancing the safety of the employees. Facilities should be a reflection of mission-specific needs. We are dedicated to a collaborative design process to ensure the renovations or new facilities serve each requirement efficiently and effectively. During the facility design process, we will focus on your identified priorities from operations and adjacencies to aesthetics and costs. With all design disciplines in-house, our design team is integrated and provides each project all areas of expertise including engineering (site civil, structural, mechanical, electrical, fire protection), architecture, interior design, landscape architecture, and cost estimating services.

Construction Management

Using sound judgment and reason to interpret contract documents, our team can improve contractors' adherence to plans and schedules. We keep communication channels open between all parties, allowing for minor design changes to enhance quality and affordability while mitigating propagation of minor issues. Safety is a very real concern at oil & gas sites and facilities/refineries. We do not take safety lightly and adhere to all requirements identified by the client and ISN. Additionally, we offer services in cost validation, schedule oversight, document control, submittal review, quality assurance and control, construction management staffing, and site observations.



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