ENVIRONMENTAL, HEALTH AND SAFETY CONSULTING SERVICES

In addition to providing conventional environmental health and safety (EH&S) consulting services, Greene & Associates, Inc. also provides an advanced solution approach to your environmental problems. We do this by looking beyond the problem itself to the causes and impacts of the problem. Additionally, Greene's consultants approach the overall problem and solution from the client's perspective, in particular the impact on the financial bottom line. As problem solvers, we use our vast process industry experience to help the client first clearly define the problems and then solve them.

Greene's typical EH&S consulting services on projects include the following:

Litigation

- Provided assistance to law firms on a merger and acquisition case between two
 chemical companies on environmental and safety issues. Environmental issues
 involved violations related to emissions from various process units and tanks.
 Performed investigations. Worked on process issues related to these
 environmental problems including matters concerning API, ASTM and ASME
 standards. Worked on various pollution equipment and remedial cost claims.
- Provided assistance to a law firm on safety issues of the above case between two chemical companies on matters related to PSM and PHA aspects of OSHA regulations that involved multiple issues.
- Provided assistance to a law firm representing a city and several plaintiffs against a major oil company on a lawsuit related to an old refinery pollution liability issues including facility history, historical standards and regulations, operations and maintenance, and aspects related hydrocarbon contamination (benzene).
- Provided assistance to a law firm representing an oil and gas exploration and production on a lawsuit related to environmental (air) pollution problems.
- Provided assistance to a law firm representing a major oil company on a lawsuit related to refinery pollution problems.
- Provided assistance to a law firm representing a City Government on issues related to hydrocarbon contamination of the groundwater during construction of train tunnel from various underground storage tanks (UST).
- Provided assistance to a law firm representing a major West Coast Oil Company and the company on a lawsuit related to historical hydrocarbon contamination due to oil and product pipelines and tank terminals, including issues related to operations and maintenance, regulations, codes and standards.
- Provided assistance to a law firm representing an oil company on a lawsuit related to Superfund (CERCLA) site in determining, identifying, quantifying and characterizing wastes (hazardous and non-hazardous) from various chemical and industrial facilities in a certain geographical area.
- Provided assistance to law firm representing insurance companies regarding historical pollution and liabilities at a refinery.

- Provided assistance to a CA law firm on a refinery benzene exposure case.
- Provided assistance to a law firm representing a major chemical company on a lawsuit with issues concerning waste identification and characterization from different chemical and industrial facilities to a Superfund (CERCLA) site. Assistance involved issues related to pollution liability and cost recovery.
- Provided assistance to a law firm representing a petroleum company on a CERCLA lawsuit with issues concerning identification, comparison and characterization of wastes based on environmental regulations.
- Provided assistance to a law firm representing a chemical company on a lawsuit related to economic value and processing capabilities of certain process wastes from a petrochemical facility.
- Provided assistance on a lawsuit related to environmental process equipment at an ethylene facility. In addition, worked on matters related to Process Safety Management (PSM) and Process Hazard Analysis (PHA) issues.
- Provided assistance to a law firm representing insurance companies on a pollution liability lawsuit related to historical contamination at a tank farm (above ground and underground storage tanks).
- Provided assistance to a law firm representing an insurance company on a chemical/polymer plant fire and explosion case on matters related to cause and origin, chemical process and OSHA matters.
- Provided assistance to a law firm with a study concerning asbestos in refineries, petrochemical and chemical plants.
- Provided assistance to a law firm on issues concerning historical environmental regulations (CERCLA, RCRA, TSCA, CWA, CAA and others).

Technical/Insurance/Economics

- Assistance in problem definition and strategies for addressing complex environmental problems followed by innovative, cost effective solutions.
- Source identification, elimination, and/or control for process unit air contaminants, wastewater, and hazardous wastes.
- Waste Minimization/Source Control, often accompanied by significant cost savings over treatment alternatives.
- Economic/benefits assessments of environmental problems and needs.
- Energy and Environmental Policy/Economics.
- Consulting assistance on current air, wastewater, hazardous waste, and groundwater/subsurface issues.
- Determination of pollution liability and related costs.
- Codes, Standards and Recommended Practices Review.
- Expert testimony with experience covering the entire history of the Environmental Movement in the U.S.A.
- Historical review of site activity, hazardous waste sites and asbestos usage at facilities.
- Startup/operating assistance with treatment units, and treatment unit performance evaluation.

- Operations and Maintenance Procedures Review. Process Design/Project Management Oversight.
- Preparation of insurance claims related to pollution at petrochemical plants and chemical plants.
- Review of cleanup costs related to insurance claims and losses.
- Preparation of insurance claims related to pollution liability at a residential /commercial property.

Investigations

- Investigation of a wind turbine project site for contamination due to presence of pollutants/chemicals, which were initially suspected to be cause of foundation failures.
- Investigation of oil spills at a governmental facility.
- Investigation of a major chemical spill at a fertilizer plant after an explosion which damaged the plant and the tanks.
- Investigation of pollution related costs at an ammonia plant.
- Investigation (assessments and audits) of refineries, petrochemical plants and chemical plants to assess environmental problems.
- Investigation of hazardous waste disposal facility.
- Phase I and Phase II site investigations (facilities, process units, tank terminals, gas stations, etc.). Hydro geological investigations of sites.
- Environmental, health and safety audits of PEMEX refineries, petrochemical, chemical plants and storage terminals.
- Environmental and safety issues related to pipelines.

Regulatory

- Assistance in facilitating negotiation and representing the client in regulatory meetings.
- Strategic guidance in complex regulatory issues and sorting our overlapping regulatory requirements.
- Overall site assessment and inspection of facilities and pollution control equipment for compliance.
- Impact of various regulations on plant operations, process economics and overall project budget
- Economic impact of various regulations.
- Development of incident/compliance tracking and reporting systems.
- Implementation and upgrading of audit systems.
- Regulatory interpretation and implementation at the plant level.
- Integration of Risk Management into management decisions to reduce long-term liabilities and costs.
- Assistance with insurance coverage issues as related to environmental management.

- Assistance in organizing and managing a corporate environmental department.
- Development and implementation of environmental policies.
- Assistance in developing and environmental management system.
- Identification of issues with respect to potential impacts on the client and strategically planning to mitigate the impact.
- Development and implementation of an accurate environmental cost accounting system. Environmental budget development.
- U.S. Code of Federal Regulations (CFR). Title 40 Protection of Environment Regulations
- Plants, Facilities, Buildings, Terminals and Pipeline Assistance on projects and lawsuits on issues related to codes, standards and practices – API, ASME/ANSI, ASTM, NFPA, NACE, NLPA, NEMA, NEC, AWWA, Building Codes, ASCE, Factory Mutual Engineering, UL Standards and other applicable standards.
- LDAR and Benzene Waste Operations NESHAPs (BWON) practices
- Tanks and flares regulatory issues

Other Issues

- Determination of causes and effects of fires, explosions, spills and other sudden release environmental episodes.
- Due diligence for property sales and transfers including mergers and acquisitions.

HEALTH AND SAFETY

Greene & Associates, Inc. also provides and has provided a full range of health and safety consulting services on numerous matters related to refineries, petrochemical plants, chemical plants, gas plants and pipelines. Our services include the following:

Litigation

- Wrongful death cases
- Chemical exposure cases
- Benzene exposure cases
- Process equipment lawsuits related to health and safety aspects
- Tank terminals and farms equipment safety
- Overtime and safety issues
- Personal injury and wrongful death cases
- Plant accidents
- Refinery, petrochemical and chemical plant related occupational safety and health (29 CFR 1910) cases including process safety issues.
- Safety issues on fire and explosions matters.
- Gas plant safety issues.
- Gas Station fire, safety, spills and leaks

Technical

- Accident Investigation
- Safety Engineering
- Corrosion Inspection/Control
- Codes, Standards and Practices
- Electrical Codes
- Structural Analysis
- Process and Equipment Performance Evaluation
- Materials Engineering Section

Inspections and Regulatory Compliance

- Process Plants and Tank Terminal Inspections
- Asbestos Assessment/Abatement
- Electrical Safety Inspections
- OSHA Regulations (29 CFR 1910) Safety Compliance Inspections
- Offshore Platform Inspections
- Oilfield Construction Safety Reviews
- Safety Assessments and Audits Process Safety Management (PSM) and Process Hazard Analysis (PHA)

Surveys/Assessments

- Safety Policy and Procedures Evaluation
- Analysis of Noise Surveys, Ventilation Surveys and Heat Stress Assessments
- Facility Siting evaluations

Industrial Hygiene

- Accident Related Exposure Assessment
- Personnel Exposure Assessment
- Hazard Communications
- Industry Specific Evaluations
- Toxicology
- Illumination

G&A has on several projects and lawsuits related to various industry standards and governmental regulations on issues related to environmental health and safety standards, and federal, state and local regulations.