



Site Assessment and Remediation



This series of fact sheets highlights our expertise in Managing Environmental Liability and covers the following topics:

- **Site Assessment and Remediation**
- Due Diligence
- Liability Assessment
- Risk Assessment
- Impact Assessment
- Geotechnical Engineering

ICF International shows clients how to successfully balance regulatory requirements, engineering judgment, economics, and scientific knowledge to ensure that risk and liability from environmental concerns are appropriately identified and effectively managed.

ICF International develops and deploys cost effective site assessment and remediation solutions by understanding the unique objectives of governments and corporations when dealing with environmental liabilities. We develop innovative environmental solutions based on our clients' needs, providing field services and remediation program management to identify potential environmental liabilities; investigate contaminated properties; design, build, and operate treatment systems; and expedite the cleanup, transfer, and reuse of these properties. Whether Phase I/II due diligence or full-scale investigation and remediation of hazardous waste, brownfields, or munitions-contaminated sites, ICF applies its broad site assessment and remediation experience and diverse expertise to effectively manage our clients' environmental liabilities.

By combining our understanding of the project objectives with our detailed knowledge of the range of technical and financial options available for managing environmental liabilities, we enable our clients to make informed and prudent decisions while considering the interests of all stakeholders. ICF has an unparalleled record of building consensus among clients, regulators, and the public in support of cost-effective and fully protective solutions.

Our detailed pre-project planning and careful project management ensure both comprehensive characterization and the flexibility to adapt to new information, regulations, or client needs. ICF maintains the highest standards of quality and safety. We draw on the diverse backgrounds and expertise of our dedicated and accomplished professionals to assemble the best qualified project teams, integrating the necessary technical disciplines tailored to our clients' individual needs.

Featured Solutions

Dense Non-Aqueous Phase Liquid (DNAPL) Remediation Design and Vapor Intrusion Assessment, Former Dye Facility

ICF is supporting the U.S. Army Corps of Engineers and the U.S. Environmental Protection Agency with the characterization, evaluation, and design of a chlorinated DNAPL recovery remedy in a fractured bedrock aquifer at the Nyanza chemical waste dump Superfund site in Massachusetts. ICF also conducted indoor air vapor intrusion modeling and risk assessments for numerous residential, municipal, and commercial properties overlying the contaminant plume.



Commercial Property Site Assessment and Impact Mitigation, Law Firm

ICF was engaged by a prominent southern California law firm to evaluate whether releases of chlorinated solvents from a nearby property had affected the groundwater beneath its client's site. The site was located in an Orange County area where redevelopment activity is vigorous and lucrative, and impact to the site could reduce property values significantly. ICF designed a sampling and analysis plan to quickly assess whether the groundwater or soil gas beneath the site had been affected. ICF worked with the law firm and property owner to plan and implement site development strategies to minimize migration of the dissolved-phase chlorinated solvents and prevent future reduction of property value.

Passion. Expertise. Results.

Featured Solutions (continued)

Site Assessment, Former TNT Manufacturing Facility



ICF led the initial site assessment to determine the presence of TNT constituents, breakdown products, and other residues after the decommissioning of a formerly used defense site (FUDS). ICF evaluated the 600-acre World War II manufacturing area using innovative field analytical screening

methods and the U.S. Environmental Protection Agency Triad approach to cost effectively assess the broad area.

Facility Support at National Energy Technology Laboratory (NETL), U.S. Department of Energy

ICF manages the groundwater program for NETL-Albany including investigation, regular monitoring, risk assessment, and remediation. ICF developed the site-wide Groundwater Monitoring Plan (GMP), conducted optimization studies, and updates the GMP annually. ICF is conducting the investigation and human health risk assessment of chlorinated solvents in the groundwater at DNAPL concentrations onsite and offsite under an elementary school and in private drinking water wells.

Ecological and Human Health Risk Assessments of Recreational Lake, U.S. Army

ICF performed ecological and human health risk assessments on a PCB-contaminated recreational lake that involved collection of lake water, sediment, and tissue samples; chemical analyses, including congener analysis; toxicity testing; and macroinvertebrate, angler, and wildlife surveys. ICF evaluated human health risks associated with the ingestion of contaminated fish species by various subpopulations and estimated the risk to higher-level mammal and bird species through an ecological food chain model.



Environmental Support, Major California Municipality

For more than 10 years, ICF has provided a wide range of environmental consulting services to a major southern California municipality. ICF has worked side-by-side with the City's environmental division to complete numerous

contaminated property assessments, remediation of soil and groundwater at several city-owned properties, and dozens of Phase I environmental site assessments in accordance with the City's progressive sustainability policy.

Former Ordnance Disposal Site Closure, U.S. Army Corps of Engineers

ICF is completing a remedial investigation/feasibility study and proposed plan at a FUDS site. ICF is leading a full unexploded ordnance/munitions and explosives of concern (MEC) investigation, including geophysics, contaminant fate and transport analysis, and ecological/human health risk assessment. Target explosives being investigated include TNT, RDX, picric acid, and perchlorate. The proposed plan will address explosives contamination in soil and groundwater and MEC removal actions.



Brownfields Redevelopment/Reuse, Various Locations

ICF has experience in guiding corporations and municipalities through the myriad of environmental issues associated with the redevelopment and reuse of legacy contaminated properties. ICF has been engaged by numerous clients to perform preliminary site assessments, prepare risk assessments, conduct remediation, and assist with stakeholder involvement to support the redevelopment of these properties. We focus on results-based projects that protect the environment using best available science, promote collaborative partnerships, strengthen economic viability of communities, encourage property reuse, and improve communities' quality of life.

Solvent-Contaminated Groundwater Remediation, U.S. Army Research and Development Facility

ICF is investigating and remediating groundwater contaminated with chlorinated solvents at a U.S. Army Superfund site in Massachusetts. ICF performed remedial investigations using innovative field screening techniques; prepared remedy documents; designed, constructed, and operated an extraction and treatment system; performed long-term monitoring and monitored natural attenuation evaluation; optimized cleanup using three-dimensional groundwater modeling; and is evaluating enhanced in-situ biologic degradation.

About ICF International

ICF International (NASDAQ: ICFI) partners with government and commercial clients to deliver consulting services and technology solutions in the energy, climate change, environment, transportation, social programs, health, defense, and emergency management markets. The firm combines passion for its work with industry expertise and innovative analytics to produce compelling results throughout the entire program life cycle, from analysis and design through implementation and improvement. Since 1969, ICF has been serving government at all levels, major corporations, and multilateral institutions. More than 3,000 employees serve these clients worldwide. ICF's Web site is www.icfi.com.

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