

# *THIS IS NO WAY TO HANDLE ENVIRONMENTAL PROBLEMS*



*HAVE GCE SOLVE THEM FOR YOU*



**G.C. ENVIRONMENTAL, INC.**  
ENVIRONMENTAL CONSULTANTS



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**G.C. Environmental (GCE)** is a full-service, national environmental consulting firm based in Westchester County, New York.

Since its founding in 1989, GCE has offered a broad spectrum of engineering and consulting services related to environmental assessment, management, and remediation.

Over the years, these services have met the needs of a wide range of clients, including businesses, industries, and local governments, from across the United States. Our satisfied customers include:

- **Law Firms**
- **Developers**
- **Municipalities/Government**
- **Banks and Loan Institutions**
- **Real Estate Owners/Managers**
- **Telecommunications Companies**

**G.C. Environmental** has assembled a highly-qualified and superbly-trained team of environmental professionals, including:

- **Chemists**
- **Biologists**
- **Geologists**
- **Geochemists**
- **Industrial Hygienists**
- **Mechanical Engineers**
- **Civil Engineers**
- **Hydrogeologists**
- **Industrial Facilities**
- **Construction Managers**
- **Environmental Scientists**

Each GCE project is overseen by experienced managers and monitored in real-time by our specifically-designed, in-house computerized project tracking system.

The combination of experience environmental professionals, active project management and unparalleled customer service ensure that each GCE product is delivered on schedule, of the highest quality, and at competitive prices.



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*G.C. Environmental, Inc. is a full-service environmental consulting firm, specializing in a multitude of areas of expertise. Here are descriptions of some of our main service areas:*

## Environmental Site Assessments & Investigations

Environmental Site Assessments (ESAs) – including “Phase I” Assessments and “Phase II” Investigations – provide information critical:

- as “due diligence” and as a decision-making tool in real estate transactions
- to evaluate risks associated with underground storage tanks and other environmental conditions
- in investigations of petroleum products/hazardous materials releases
- in subsurface contamination investigations.

Over the past 10 years, GCE’s team of environmental specialists has performed 1000s of ESAs for private and public sector clients alike.



## Site Remediation

Soil and groundwater remediation is often necessary when releases of petroleum products or hazardous materials, or subsurface contamination occur at a site. Cleanup, or “closure,” of a site may involve:

- delineation and monitoring of the contaminant plume
- feasibility studies and cleanup alternatives analysis
- remedial design
- pilot testing
- implementation of remediation

GCE provides comprehensive soil and groundwater remediation services to a broad range of clients. Over the years, we have conducted remedial investigations at – and successfully closed – 100s of sites rapidly and cost-effectively – and with a minimum of interruption to normal operations at sites.

## Petroleum Storage Tank Management

One of the most common environmental real estate liabilities is associated with petroleum storage tanks. Once a product that leaked from an underground storage tank (or UST) has reached the groundwater, the cleanup of such a release can be extremely difficult and expensive.

GCE is one of the industry's leading consulting firms in performing:

- surveys and studies
- design of upgrades and new tank systems
- testing and assessments
- construction management



GCE has remediated hundreds of aboveground and underground storage tanks in residential, commercial, and industrial facilities, gasoline stations, and fuel depots. GCE can handle any tank made of any construction material, containing most petroleum and chemical products, in any size and location.



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## ***ENVIRONMENTAL SITE ASSESSMENT AND NATURAL AND CULTURAL RESOURCES ASSESSMENT***

### **Cellular Telecommunications**

Successfully completed over 2,000 Phase I Environmental Site Assessments and NEPA Land Use Screening for the major cellular telecommunications companies in the northeastern United States. Projects were performed on a variety of site types ranging from heavy industrial sites to vacant wooded land. These assessments were performed in accordance with CERCLA, NEPA, FCC and SHPO requirements prior to acquisition and development of all types of cellular sites including raw land, collocations, replacement and rooftop.

### **Banks**

Performed a Phase I Environmental Site Assessment for one of the largest banks in accordance of the requirements of ASTM E1527 Standards where historical manufacturing and petroleum filling stations, dating back to 1918, were identified. Conducted subsequent subsurface investigations to determine the extent and nature of soil contamination and identify the location of remaining underground storage tanks (USTs). Determined the extent of soil contamination and conducted a disposal alternative study. Uncovered numerous gasoline UST and perform UST removal and assessment. Provided oversight of excavation and disposal of the entire site. A total of 40,000 tons of contaminated soil was excavated and disposed off-site.

## ***SITE REMEDIATION***

### **Dry Cleaners**

As a result of the discovery of historical discharge of dry cleaning solvents into the subsurface soil, performed an investigation to determine the extent of the soil contamination at a site that is located above a sole-source aquifer. As discharge was into a dry-well below the basement level of an operating dry cleaning establishment, highly specialized equipment was utilized in this extremely confined area. The resulted findings indicated that long periods of historical discharges have impacted a vertical sand column that was limited in its diameter but extended to groundwater at 60 feet below grade.

### **Municipal Properties**

Conducted preliminary investigation at a municipal garage site to determine the nature and extent of soil and groundwater contamination originating from a 4,000-gallon gasoline UST removed from the site. The site investigation revealed contaminated soil column of 60 feet in diameter, extending from ground surface to groundwater approximately 45 feet below ground surface. The resulting groundwater contamination plume extended over 200 feet in the down-gradient direction and over 150 feet in the cross-gradient direction. The subsequent remedial investigation, well slug testing and soil vapor pilot testing resulted in a three (3) phase media design. The groundwater remediation consisted of high yield submersible pumping through air stripping with reactivated carbon polish. The soil remediation consisted of air sparging with multi-level, multi point soil vapor extraction. The resulting soil vapors were then moisture separated and activated carbon filtered prior release to the atmosphere.

### **Automotive Service**

During a preliminary investigation prior to a real estate transaction of an abandoned indoor automotive repair facility, several areas of potential concern were identified. These included a drainage system, consisting of floor drains and an oil/water separator, all of which were in poor condition, several hydraulic lift pistons and indications of potential underground storage tanks. Subsequent investigations and remedial action lead to the removal of the entire drainage system, several hydraulic lift pistons and several underground storage tanks containing gasoline, waste oil and motor oil. The impact from the drainage system, hydraulic lift pistons and underground storage tanks resulted in the removal and offsite disposal of approximately 200 tons of contaminated soil.

## ***PETROLEUM STORAGE TANK MANAGEMENT***

### **Property Owner/Management**

As a result of a heating oil underground storage tank test failure, several alternatives were evaluated since the underground storage tank was located completely below a portion of a building that was utilized for office space. The anticipated effort in isolating and repairing the breach resulted in the abandonment of the underground storage tank in-place and the conversion to natural gas system. The underground storage tank was very complex due to the location of the tank. The resulting successful cost effective solution included access to the tank from the interior of the office floor for both the tank's content cleanup and sampling of the surrounding soil. To demonstrate that the tank did not leak, the soil immediately surrounding the tank was sampled via entry, drilling of the tank's shell in the tank's bottom and sides and collection and analysis of soil samples. The tank was then filled with concrete slurry utilizing specialized slurry mix and a concrete pump.





## ENVIRONMENTAL ASSESSMENT & INVESTIGATION

- Phase I Environmental Site Assessments
- Transaction Screenings
- Phase II Investigations
- Groundwater Investigations/Studies
- Geoprobe Drilling
- Geophysical Investigations
- Asbestos Surveys
- Lead-based Paint Surveys
- Mold Testing
- Potable Water Testing
- Radon Testing
- Risk/Exposure Assessments
- NEPA Land Use Screening
- Environmental Assessments
- Environmental Impact Statements
- Wetlands Studies

## STORAGE TANK MANAGEMENT

- Underground and Aboveground Tank Compliance
- Tank Closures
- Tank Removals
- Tank Closure Assessments
- Complete Underground and Aboveground Tank System Design
- Spill Prevention
- Tank Testing, Installation, Upgrade and Repair

## SITE REMEDIATION

- Remedial Investigations
- Remedial Alternative Evaluations
- Pilot Testing
- Remedial Design
- Remedial Implementation
- Remedial Oversight
- Emergency Spill Response
- Performance Monitoring
- Hazardous Waste Management
- Waste Disposal Evaluation
- Dredging and Solidification Studies

