#### **ENVIRONMENTAL SERVICES**

- Phase II Environmental Site Assessments (ASTM E 1903-11)
- Brownfields

#### **ASBESTOS CONSULTING SERVICES**

- Building Surveys and Assessments
- Abatement Project Design and Specifications
- Bid Solicitations and Contractor Walk-thru
- Project Monitoring (EPA&OSHA)
- Project Air Sampling
- Closeout Reporting

#### **LEAD-BASED PAINT CONSULTING SERVICES**

- Building Inspections and Assessments:
  - o Bulk Sampling
  - o XRF Screening
  - o Ghost Wipe Sampling
  - Water Sampling
  - Soil Sampling
- Abatement Project Design and Specifications
- Bid Solicitations and Contractor Walk-thru
- Project Monitoring(EPA&OSHA)
- Project Clearance by EPA Certified Risk Assessor

#### **SPECIALIZED SERVICES**

- Mold Assessments and Sampling
- Mold Remediation Plan
- Post-Remediation Visual Clearance and Indoor Air Quality (AIQ) testing
- PCB Sampling
- Particle and Hazardous Gases Project Air Monitoring Services

#### PHASE II ENVIRONMENTAL SITE ASSESSMENTS

A Phase II Environmental Site Assessment is conducted when there is sufficient information from previous investigations (Phase I) to indicate the presence or likely presence of Recognized Environmental Conditions on the property. It is intended for use by the property owner to obtain scientifically valid data on previously identified Recognized Environmental Conditions or data gaps in Phase I Environmental Site Assessments.

The work performed during a Phase II Assessment involves collection and analysis of samples from the surface and subsurface of identified areas of concern within the property as well as from any buildings on the property, locating potential sources and pollutant pathways, developing a Conceptual Site Model that graphically depicts the environmental conditions on and around the property and the likely impacts on human health and the environment.

GPE utilizes its staff to conduct Phase II Environmental Site Assessments in an objective and scientifically representative manner that promotes clarity and transparency and provides the property owner with the appropriate information to proceed to the remedial phase of the project, which concludes the necessary actions for rendering the property free of hazardous contamination, and makes it available for real estate transactions and development.

#### **BROWNFIELDS**

Brownfield's are abandoned or underused industrial facilities with varying degrees of contamination that can be cleaned and become prime real estate property.

GPE can assist you in turning your Brownfield into a City of New York Certified Greenfield.

A Brownfield is a parcel of land where redevelopment or reuse may be complicated by the presence or potential presence of contamination, including hazardous waste and petroleum products, in any environmental media including soil, historic fill, surface water, groundwater, soil vapor or indoor air. Brownfield's are usually abandoned or underused industrial and commercial facilities.

#### ASBESTOS CONSULTING SERVICES

GPE is highly experienced in surveying buildings for asbestos problems, developing management plans, preparing abatement specifications, and overseeing abatement as the Third Party Project Management for the building owner. Specifically, GPE's Asbestos Management Services include:

## Asbestos Building Surveys Assessments

Our NYS DOL and NYC DEP Certified and licensed Asbestos Building Inspectors conduct asbestos surveys prior to real estate transfers, renovations, or demolition of buildings. Our Inspections include an inventory of accessible building areas to determine the presence of suspect asbestos containing materials. Documentation includes estimates as to linear/square footages of each material, its condition, accessibility, friability and potential for fiber release. Analysis of suspect asbestos containing material samples is performed in Laboratory that is accredited by National Voluntary Laboratory Accreditation Program (NVLAP) under the National Institute of Standards & Technology and the New York State Department of Health (NYSDOH) Environmental Laboratory Approval Program (ELAP). GPE inspection reports include a written description of where asbestos bulk samples were collected, where Asbestos Contained Materials (ACM) are located and the laboratory reports. If ACM are discovered, GPE can assist the Client with bid solicitation from abatement contractor, developed abatement drawings/specifications and provide Project/Air Monitoring Services during the abatement phase of the project.

### Abatement Project Design and Specifications

GPE's project designers prepare project specifications which contain an explicit, detailed scope of work, directives and required procedures for remediation. GPE can also provide a list of qualified bidders, mediate pre-bid meetings/site inspections, assist with the bid review/contractor selection, and supervise pre-construction meetings.

### Asbestos Project Management/Monitoring

GPE will assign a Project Manager to oversee each abatement project and ensure efficient scheduling, priority analysis, and compliance with project specifications. An on-site Technician will perform daily air monitoring of each project in accordance with federal, state, and local regulations and maintain daily inspection logs. GPE will verify the completion of the asbestos project by conducting a visual inspection of the abatement area to ensure that the work site is in compliance with the established criteria. If applicable, the inspections are followed by air monitoring of the abatement area to ensure final airborne asbestos levels meet design criteria or mandatory state/local regulatory limits. A final air clearance comprehensive report, detailing the daily work activities and related tests are then prepared by our office staff.

#### **LEAD BASED PAINT SURVEYS**

### **GPE's Lead Based Paint Consulting Services include:**

### Building Surveys

GPE utilizes portable XRF analyzers to perform non- destructive sampling/analysis of painted substrates for comparison with HUD criteria. Where inconclusive readings are found, paint chip samples are collected for confirmation purposes. All painted and varnished components are evaluated within units and common areas.

#### Risk Assessments

Where lead based paint is found, a visual inspection for deterioration/damage as well as surface contamination sampling for lead dusting is performed. Individual wipe samples are collected utilizing HUD protocol from window sills, window wells and floors. Soil samples are also collected from bare soil areas, including playgrounds, to fully evaluate children's potential lead exposures.

## Potable Water Testing for Lead Concentrations

All water samples collected according to the U.S. EPA - 3Ts for Reducing Lead in Drinking Water in Schools and Testing Schools and Child Care Centers for Lead in the Drinking Water Guidance's for public water system (PWS).

### Project Design

Technical specifications are prepared which detail specific abatement requirements for building components. The most efficient and cost-effective method is employed from possible options including component replacement, on/off site stripping, encapsulation or enclosure.

## Project Management/Monitoring

GPE oversees lead abatement projects for compliance with project specifications and performs air monitoring for comparison with OSHA's lead standard. Management inspection logs and reports of activities during the course of the abatement operation are maintained. Inspections include checking the standard operating protection and decontamination systems as well as packaging and disposal of lead waste. Waste characterization (hazardous or non-hazardous) through TCLP testing is performed. Project completion is verified via a visual inspection of the abatement area followed by final wipe/surface contamination sampling.

#### **MOLD ASSESSMENT SERVICES**

#### **GPE's Mold Consulting Services include:**

#### Mold Assessments

GPE Certified Mold Assessor performed pre-remediation on-site visual verification assessment inspection of the construction materials to evaluate mold and moisture problems. A visual inspection is the most important step in identifying mold contamination problem. Any water damage and mold growth on the ceiling tiles, gypsum wallboard (sheetrock), cardboard, paper and other cellulosic surfaces are given careful attention during this phase. The purpose of the visual inspection is to identify visible mold or conditions that may be productive to microbial growth (examples musty odor/water intrusion).

## Mold Indoor Air Quality Test(IAQ)

Indoor Air Quality Non-Viable (Spore Traps) test (IAQ) of the construction materials to determine if an inspected area is acceptable for re-build and/or re-occupancy.

## Mold Visual Clearance Inspection

On-site post-remediation "after mold has been remediated" verification assessment survey including a visual inspection and Moisture Level reading test of the construction materials that were part of the remediation work to determine if an inspected area(s) are acceptable for re-build and/or re-occupancy.