



BROWNFIELD SERVICES

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FIRM PROFILE

PWGC: SOLUTIONS FOR A CHANGING WORLD

MEET PWGC

PWGC was founded by Paul Grosser, PhD, PE, PG, a thought leader who recognized the need for a multi-disciplined engineering and environmental consulting firm that offered a diverse range of services to meet market demand regionally and nationally. Based in Bohemia, NY, PWGC has offices in New York City, Syracuse, Saratoga Springs, Monticello and Connecticut.

PWGC serves the New York Metropolitan region and has established an industry recognized reputation for innovative problem solving and providing quality services to municipal, educational, private, public and federal clients. We are dedicated to providing cost-effective and timely services that result in practical solutions for its clients.

PWGC has a multi-disciplined staff of more than 70 professionals. Our strength lies with these licensed professional engineers, geologists and hydrogeologists, LEED accredited professionals and environmental compliance specialists, which gives PWGC a wealth of experience key to helping bring your project from idea to reality.

CHOOSE PWGC

Whether your objectives are planning, design, redevelopment, or resiliency, PWGC's solutions are innovative and economical. PWGC is committed to client goals and our dynamic team of professionals provide innovation and flexibility to deliver customized solutions to projects regardless of size, complexity or duration.

THE PWGC DIFFERENCE

What sets us apart is our customized approach to each project, our rapport with regulatory agencies and our exceptional project management. PWGCs assets that translate into additional value for you include the following:

- Strong working relationships with key regulatory sector players
- Specialists in regulatory requirements to facilitate quicker approvals
- Highly responsive to budget & time constraints to get your project on line faster
- Project and quality control monitoring to exceed your project needs
- More than 70 dedicated professionals to provide a wide array of services
- Strict adherence to environmental compliance standards

Make PWGC's quality environmental consulting and engineering solutions work for you.



BOHEMIA, NY • NEW YORK, NY • MONTICELLO, NY • SARATOGA SPRINGS, NY • SYRACUSE, NY • SHELTON, CT
 P: 631.589.6353 • F: 631.589.8705 • PWGROSSER.COM

PWGC QUICK FACTS

Corporate

- Founded & Incorporated: 1990
- SAM/SBA Registered
- Small Business
- DUNS # 798730966
- Federal ID: 11-3612196

Offices

- Bohemia, NY
- New York, NY
- Monticello, NY
- Saratoga Springs, NY
- Syracuse, NY
- Shelton, CT

Qualifications

- LICENSES - Engineer, Geologist, LSP, NC, NY, NJ, PA, MD, IN, NH, MA, FL, WA
- LEED-AP
- Envision

Service Codes

NAICS

- 562910 Environmental Remediation
- 541330 Engineering
- 541620 Environmental Consulting
- 562998 Waste Management Services
- 541370 GIS Base Mapping
- 237130 Green Services

SIC

- 87489905 Environmental Consulting
- 8711 Engineering Services



SUMMARY LIST OF SERVICES

SEQRA Consulting and Planning Services

- Administration of the SEQRA Process
- Type II Opinion Letters
- Coordinated Review
- Environmental Assessment Forms
- Scoping Documents
- Environmental Impact Statements
- Determinations of Significance
- Findings Statements
- Notices and Assistance with Resolutions
- Land Use and Zoning Assessments

Environmental Services

- Contract Administration
- Petroleum & Chemical Spill Investigation & Remediation
- Remedial Alternative Assessment & Design
- Remedial Construction Management
- Property Transaction Services
 - Due Diligence, RI/FS, PCR
 - Brownfields Redevelopment—Investigation, Remediation, Program Management
 - Phase I, Phase II Environmental Site Assessments
 - NYC E-Designated Sites
 - NYC OER Program Management—Investigations, Remediation, Grant Application
 - Cost Estimating—Property Investigation & Remediation
- Environmental Audits—Assess Environmental Liability
- Environmental Assessment & Contaminant Source Evaluation
- Groundwater Investigation & Remediation
- Aquifer/Pumping Testing
- Risk-Based Approach Solutions
- Site Closure Reports
- UST/AST Management
- Air, Water, Soil & Soil Vapor Sampling/Monitoring Community Air Monitoring
- Environmental & Health Risk Assessment
- Radiological Investigation & Remediation Services
- Hazardous Waste Management
- Soil Management, Certified Clean Fill
- Storm Water Management
- Water Table Evaluation & Flood Mitigation
- Dewatering Design, Permitting & Compliance Sampling

Environmental Compliance/Management

- Air Quality—Title V Permitting, Air Emission Inventories, Tier II & TRI Reporting
- Articles XI & 12 Hazardous Materials Storage Compliance for Nassau & Suffolk Counties, NY
- Chemical/Petroleum Bulk Storage Tanks—Permitting, Audits, Regulatory/Environmental Compliance Management
- Facilities Contingency Plan Development/Management, including SPCC, SWPPP, FRP
- Compliance Review
- Regulatory Compliance Reporting
- FAR 139.321 Fire Safety Inspections
- Fuel Storage Facilities & Mobile Fuel Equipment

Industrial Hygiene

- Asbestos Inspections and Testing
- Indoor Air Quality

- Legionnaire Insoections
- Lead/Mold Testing and Remedial Plans
- Noise Surveys

Expert Counseling/Client Representation

- Expert Testimony, Support & Counsel

Wastewater/Water Supply

- Water Supply/Wastewater—Systems, Planning, Design
- Groundwater Modeling
- Site/System/Feasibility Evaluation, Planning & Technical Assistance
- Water Conservation Plan Development

Natural Resource Studies

- Wetlands Delineation, Permitting & Mitigation Design
- Threatened & Endangered Species Surveys
- Migratory Studies
- Ecological Studies
- Ecological Risk Assessments
- National Environmental Policy Act (NEPA) Studies
- Planning
- Watershed Analysis

Energy/Sustainability Solutions

- Geothermal System Feasibility Analysis, Design, Permitting & Construction Management
- Renewable Energy Design for Solar & Wind
- Carbon Footprint Analysis, Profile & Management
- Alternative Fueling Station Planning & Design, Equipment Specification, Construction Observation, Permitting, Compliance & Facility Commissioning for Compressed Natural Gas, Hydrogen, Biodiesel & Ethanol-85
- Building Due Diligence & Energy Studies
- LEED Administration & Sustainable Design Practices
- High Performance Sustainable Buildings
- Energy Conservation & Energy Recovery Alternatives
- MEP/High Efficiency Equipment Solutions
- Power Generation, Cogeneration & Fuel Cells
- Energy Modeling, Utility Rebate Programs & Tax Incentives
- Green Legislation & ARRA Stimulus Grants
- GIS Based Modeling for Wind, Solar & Carbon Footprint Analysis

Civil/General Engineering

- “Best Economic Alternatives” Evaluation
- Comprehensive Feasibility Studies
- Conservation Plan Development
- Construction Planning, Management, QA/QC
- Drainage Planning, Grading & Design
- Evaluation, Planning & Technical Assistance
- Facility Design & Condition Assessment
- Planning & Design
- Property Condition Report

Geographical Information Systems/Global Position Systems

- Data Collection & Conversion
- Infrastructure & Asset Management
- Wetlands & Endangered Species Delineation
- Digital Elevation Model Analysis
- Customized GIS Applications, GIS/CAD Integration
- Database Development, Conversions, Manual Digitizing
- Website Development
- GPS Field Data Collection & Post-Processing
- Remote Sensing & Image Processing



**BROWNFIELD
SERVICES**

INTRODUCTION TO BROWNFIELD SERVICES

PWGC is an experienced environmental engineering firm with a significant understanding of the New York State Department of Environmental Conservation's (NYSDEC) Environmental Cleanup & Brownfield service requirements garnered through hands-on program application. Our approach to assessing and proposing solutions for environmentally challenged properties within New York State has enabled some of the most well-known redevelopments in some of the state's most desirable districts.

PWGC possesses a team of well-honed environmental professionals lead by Senior Vice President Andrew Lockwood, PG, whose real-world experience working with environmentally distressed properties in cooperation with development and legal interests gives PWGC the required perspective to deliver remedial designs most likely to receive positive regulatory review.

The professionals at PWGC that handle the responsibilities associated with Environmental Cleanup & Brownfield Services have nearly 100 years combined experience in environmental engineering expertise. On a daily basis, PWGC delivers environmental engineering services efficiently and economically. Our exceptional personnel give PWGC's clients the foresight to make well-informed decisions to allow their projects to move from the realm of ideas to reality.

PWGC performs all consulting, project management, and support services in accordance with strict Quality Assurance and Quality Control standards. Senior personnel are actively involved in day-to-day operations, making key decisions and monitoring project progress for tasks as varied as engineering investigations, design, and construction support to review for technical investigations.

PWGC recognizes that every development project has its own identity and that each Brownfield site is unique, depending on client objectives, site conditions and regulatory environments. Our approach to each site is based on extensive discourse with the client to ensure that the plan drafted will meet their objectives.



Brownfield Expertise

PWGC has obtained certificates of completion for five (5) Brownfield sites and are currently working on several NYS Brownfield projects at varying phases of development.

PWGC has the expertise to perform necessary consulting and preparation of required documents beginning with the Brownfield Cleanup Program application itself, which is required to gain entry into the program. At this stage, it will be decided if the applicant can enter as a volunteer or participant which has an impact on work required as well as NYSDEC costs. PWGC has expertise in preparing include preparation of a Remedial Investigation Work Plan (RIWP), Interim Remedial Measures (IRM) Work Plan, Remedial Investigation Report (RIR), Remedial Action Work Plan (RAWP), Alternatives Analysis Report (AAR), Site Management Plan (SMP) and a Final Engineering Report (FER).

PWGC provides value-added environmental consultancy services to a diverse cross-section of clientele including those seeking to acquire a Brownfield property or those who have decided to sell such a site. PWGC is experienced at managing project remediation from either perspective through the efficient application of environmental engineering principles and utilizing the knowledge earned from past efforts to ensure the design and application of a remedial plan that would be the most effective.

PWGC's goal with the performance of every environmental site assessment is to provide the necessary answers to a site's environmental questions in order to clearly define the property's path toward remediation and redevelopment.



An aerial photograph of a demolition site. A large yellow excavator with a white cab is positioned on the right side of the frame, its arm extended towards the center. The ground is covered in a thick layer of grey rubble and broken concrete. In the upper left, there is a large, dark, irregular hole in the ground, possibly a tunnel entrance or a deep pit, with exposed rebar and debris. To the left of the excavator, there is a small, fenced-in area with some construction materials. The bottom half of the image is overlaid with a large, semi-transparent blue circular graphic consisting of several concentric arcs. A white rectangular box with a blue border is located in the upper right quadrant, containing the text "BROWNFIELD EXPERIENCE & CLIENTS" in white, bold, sans-serif capital letters.

BROWNFIELD EXPERIENCE & CLIENTS

BROWNFIELD PROJECTS

Glen Cove Revitalization Project - Garvies Point, Glen Cove, NY

The Garvies Point Waterfront Revitalization Project is a \$1 billion, 56-acres mixed-use development on Glen Cove's waterfront. Representing one of the most significant site redevelopments on Long Island, the efforts at Garvies Point have been years in the making and has involved the remediation and repositioning of several parcels on and in proximity to the northern side of Glen Cove Creek. Most of the parcels required significant environmental assessment, remediation and regulatory reporting based on their past, heavy industrial uses; most notably the Li Tungsten Federal superfund site and the Captain Cove State superfund site.

The Garvies Point redevelopment is slated for the construction of 555 rental apartments, 555 for-sale condominiums, and approximately 75,000 square feet of retail and office space. In addition, 28 acres of the development will consist of waterfront esplanades and parks.

Brownfield Cleanup Program - 74 Wallabout St., Brooklyn, NY

Investigation, remediation, and redevelopment of a 0.91-acre parcel through the New York State Department of Environmental Conservation (NYSDEC) Brownfield Cleanup Program. The site had been utilized in the past by various manufacturing companies including a chemical manufacturer, furniture manufacturer, and paint and varnish manufacturer. PWGC investigated the site, determined it had been impacted by historical operations and had the potential to be remediated through the NYSDEC Brownfield Cleanup Program, enrolled the site in the program, performed a Remedial Investigation, prepared a Remedial Action Work Plan, oversaw implementation of the remedial action, prepared a Construction Completion Report, and Site Management Plan which resulted in the issuance of a Certificate of Completion for the site by NYSDEC.

NYS Brownfield Cleanup Program - Bronx, NY

The client's \$20.7 million redevelopment of a 25,000-square-foot parcel, formerly used as an automobile service and gasoline filling station, included the construction of a seven-story building containing 100-unit multifamily building with 16,200 square feet of first floor commercial retail space, as well as affordable housing set-asides in conjunction with a 30-year agreement with the New York City's Housing Development Corporation (NYCHDC).

NYS Brownfield Cleanup Program - 3140 Coney Island Ave., Brooklyn, NY

The property was formerly occupied by a drycleaners for more than 50 years, which resulted in chlorinated solvent impact to the soil, groundwater, and soil vapor. The property was purchased by 3140 Coney Island Realty, LLC with plans to redevelop the property as a six-story medical office building. PWGC guided the property owner through the NYSDEC Brownfield Cleanup Program as a volunteer which resulted in the removal of almost 600 tons of hazardous soils and more than 400 tons of non-hazardous soils. Additional remedial actions PWGC performed at the site included injections of chemical oxidants into the subsurface and installation of a Soil Vapor Extraction System to prevent soil vapor intrusion into the new building and neighboring buildings. The remedial actions performed at the site have significantly reduced the volume of contaminants at the site and are protective of human health and the environment.

Brownfield Program Support Services - Rockville Center, NY

PWGC performed the necessary investigation, interim remediation and final remediation under NYSDEC's Brownfield Cleanup Program (BCP) on behalf of residential developer Avalon Bay. This was required to satisfy the proposed residential use of a sensitive 7.1 acre industrial site that was contaminated with chlorinated solvents from former operations. PWGC, in an expedited manner, met the developer's stringent construction schedule, which included demolition of existing warehouses and office buildings and construction of two apartment buildings containing more than 300 residential units.



BROWNFIELD PROJECTS

NYS ERP Remediation – 15 Horseblock Place, Farmingville, NY

The subject site was host to a former automotive repair shop and fueling station. Historical site operations resulted in the release of contaminants to the subsurface at the site. Remedial actions were undertaken by the responsible party at the time. Suffolk County acquired the property in 1999 and enrolled the site into the New York State Environmental Restoration Program to further investigate and remediate residual impacts. PWGC performed a remedial investigation at the site, developed and implemented a remedial plan, and obtained a certificate of completion for the site. PWGC is currently ensuring implementation of institutional and engineering controls for the site.

Brownfield Program Support Services – Baumann Bus, Westhampton, NY

PWGC was retained by the Suffolk County of Department of Health Services (SCDHS) to investigate the former Baumann Bus site, a 58-acre property located at Francis S. Gabreski Airport in Westhampton, NY, as part of Suffolk Counties Brownfields Program. The site was formerly used as an Air Force Base and, following the shutdown of the base in 1970, the property was used by several industrial and commercial tenants. The property was largely vacant, but a prospective tenant was looking to redevelop the property in 2011 as long as the environmental issues have been addressed. PWGC was initially tasked with the investigation of the property.

This investigation focused on two issues: Onsite Underground Injection Control (UIC) structures and an approximately 20,000-square-foot contaminant plume resulting from a spill of JP-4 jet fuel. PWGC prepared a report summarizing the findings of the IRM. The report was approved by the SCHDS and NYSDEC. No additional UIC work was required. Site remedial work was performed under the direction of a PWGC engineer as well as a PWGC environmental technician. Following the remedial activities, PWGC submitted the final engineering report which was approved. PWGC still provides long term monitoring services to the site. The completion of this project played a key role in enabling the development of the Hampton Business District by Rechler Equity.

Brownfield Program Support Services – Former Canine Kennel Facility, Westhampton, NY

The site is located at Suffolk County's Francis S. Gabreski Airport in Westhampton, NY in the New York State-designated Core Preservation Area of the region's Central Pine Barrens. The site is an approximately one-acre undeveloped parcel formerly used by the U.S. Air Force for disposal of excess equipment which included PCB containing transformers and capacitors. The future use of the site is to remain undeveloped.

PWGC was tasked with coordinating with the NYSDEC, preparation and approval of a Remedial Investigation Work Plan, implementation of the Work Plan and preparation of a Remedial Investigation (RI) Report. The RI report identified significant area of PCB contamination as well as an area of off-site contamination. PWGC recommended that an Interim Remedial Measure (IRM) Report be prepared to address the most contaminated on-site soils, removal of capacitors and removal of off-site surface soil contamination.

To satisfy the requirements of the BCP, PWGC performed a remedial investigation (RI) to collect information necessary to complete a hydrogeologic assessment of the site, address the nature and extent of contamination in soil and groundwater, contaminant transport, and identify on-site and off-site exposures routes and potential receptors. Along with the submission of the RI report, PWGC recommended an interim remedial measure (IRM) work plan be prepared to address surface soils impacted with PCBs and remove continuing sources of PCB contamination. PWGC recommended the IRM in order to satisfy the likely overall remedial actions, shorten the overall project schedule and receive a notice of completion in a streamlined fashion.



BROWNFIELD PROJECTS

Brownfield Program Support Services – Ronkonkoma Wallpaper, Easton Street, Ronkonkoma, NY

The property is a former industrial complex with history of producing paint, wallpaper, and synthetic lumber. Suffolk County acquired the property in 2001 for failure to pay property taxes. The site's structures were demolished between 2002 and 2004. Limited investigation at the site identified metals impacts from onsite drainage structures. Remedial actions were performed to remediate these impacts. Following remedial actions, residual impacts were believed to have been left in place and portions of the property had not yet been investigated.

The site was enrolled in the New York State Environmental Restoration Program (NYSERP) in April of 2007. PWGC was tasked with all stages of the NYSERP for this project. PWGC performed a Remedial Investigation at the site which determined surface soil and a single onsite underground injection control structure were contaminated with heavy metals. Based upon the findings, PWGC prepared an analysis of remedial alternatives. This analysis was discussed with Suffolk County and the NYSDEC to select the preferred remedial strategy. PWGC then assisted NYSDEC in the preparation of the Record of Decision for the site.

Due to significant levels of metals in the UIC structure, the structure was remediated under an interim remedial measure prior to preparation of the Remedial Design Work Plan.

NYC Voluntary Cleanup Program – 325 E. 25th Street, Manhattan

Redevelopment of a 9,275 square foot parcel with a Restrictive Declaration through the New York City Voluntary Cleanup Program. Redevelopment consists of the construction of a new 9-story, 53,000 square foot residential building containing 56 residential apartments (to be completed in Spring 2016). Upon completion, the building will be used as affordable housing.

PWGC performed investigation and remediation of the subject property under the New York City Voluntary Cleanup Program (VCP). The site was assigned a Restrictive Declaration by NYCDEP due to the potential presence of hazardous materials at the site based on historical usage of the property. PWGC performed a Remedial Investigation that identified historic fill material throughout the site, and based on those findings developed an appropriate Remedial Action Plan for the site. Remediation was performed by the redevelopment contractor concurrently with the construction of the building foundation under the oversight of PWGC. It consisted of removal of impacted soils/historic fill for offsite disposal, and the installation of a composite cover system and vapor barrier to pre-vent potential future exposures to residual impact left onsite. Remediation was completed in August 2015, and redevelopment is scheduled to be completed in Spring 2016.

The building being constructed will be affordable housing. Our client received an \$80,000 grant through NYCOER from the EPA's Revolving Loan Fund toward engineering/consulting costs.



BROWNFIELD CLIENTS

LENDERS	DEVELOPERS	MUNICIPALITIES
- American Community Bank of China - Bank of Smithtown - Brooklyn Federal Savings - Citigroup - Independence Community Bank - Long Island Commercial Bank - M&T Bank - State Bank of Long Island - Sterling National Bank - The Bank of East Asia - United Commercial Bank	- Belvedere Property Management - Avalon Bay - RXR - J.D. Carlisle Development Corp. - Rechler Equity Partners - Chatham Development - The Witkoff Group - Mattone Group - Naftali Group - Marstan Development Corp. - Hudson Companies - Hudson Development USA - Greater Jamaica Development Agency Ad-vanced Residential Communities Seabreeze Homes - Atlantic Development Corp. - Bedford Real Estate Planners Renaissance Realty - Crystal Bay Homes of Long Island Beechwood Organization - Trinity Real Estate - Benjamin Development Company	- Village of Westbury - Suffolk County Dept. of Public Works - Suffolk County Dept. of Health - City of Long Beach - Water Authority of Great Neck North Inc. Village of Hempstead Inc - Village of Plandome Heights Incorporated Village of Sag Harbor - Town of Babylon - Town of East Hampton - Village of Freeport - Town of Southampton - Town of Oyster Bay - Village of Lindenhurst - Town of Islip - NYC Dept. of Design and Construction - NYC Housing Authority