

BROWNFIELD SERVICES



YOUR CONTACT:

ANDREW LOCKWOOD, PG, LEP

SENIOR VICE PRESIDENT

ANDYL@PWGROSSER.COM | 631-589-6353

630 JOHNSON AVE., SUITE 7, BOHEMIA, NY 11716



FIRM PROFILE

PWGC: ENVIRONMENTAL ENGINEERING & CONSULTING

MEET PWGC

PWGC was founded 36 years ago to meet the need for a multi-disciplined environmental engineering and consulting firm offering a diverse range of services to meet market demand. Based in Bohemia, NY, PWGC has offices in Manhattan, Monticello, Saratoga Springs, and Syracuse, NY.

PWGC serves the Northeastern United States 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 timely services that result in practical solutions for our clients.

With nearly 100 employees, we at PWGC understand our strength lies with our licensed professional engineers, geologists and hydrogeologists, LEED accredited professionals and environmental compliance specialists, which gives us a wealth of expertise and experience to bring your project to fruition.

CHOOSE PWGC

Whether your objectives are planning, design, redevelopment, remediation or resiliency, PWGC's services are innovative and economical. PWGC is committed to meeting client goals, and our dynamic team of professionals provide the innovation and flexibility necessary to deliver project-driven solutions.

THE PWGC DIFFERENCE

What sets us apart is our targeted approach to each project, the allocation of a dedicated and responsive team, our rapport with relevant regulatory agencies, and our exceptional project management. These assets provide client value and include the following:

- Strong working relationships with key regulatory sector players
- Specialists in regulatory requirements to facilitate quicker approvals
- Highly responsive to project budgets and time constraints
- Project and quality control monitoring that meet project needs
- Dozens of dedicated professionals to provide a wide array of services
- Strong understanding of environmental compliance standards

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

PWGC QUICK FACTS

Corporate

- Founded & Incorporated: 1990
- SAM/SBA Registered
- Small Business
- DUNS # 152032251
- Federal ID: 11-3037778

Offices

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

Qualifications

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

Service Codes

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



SUMMARY LIST OF SERVICES

Environmental Services

- Investigation and Remediation Programs
 - Brownfields Redevelopment, including tax credit evaluation
 - Federal and NYS Superfund Site Investigation & Remediation
 - NYC OER E-Designated Sites, including grant funding application
- Phase I, Phase II Environmental Site Assessments
- Petroleum, Chemical, PFAS, and 1-4 Dioxane Spill Investigation & Remediation
- Vapor Intrusion Mitigation & Remedial Design
- Remedial Construction Management
- Soil & Waste Characterization / Disposal Management
- Cost Estimating—Property Investigation & Remediation
- RCRA Site Closure Reports
- MOSF Closure
- Air, Water, & Soil Sampling/Monitoring
- Radiological Investigation & Remediation Services

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
- Stormwater Management
- Dewatering Design, Permitting & Compliance Sampling

Industrial Hygiene

- Asbestos Bulk Sampling
- Project Monitoring
- Indoor Air Quality
- Opacity Testing
- Mold Testing and Remedial Plans

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
- Building Due Diligence & Energy Studies
- LEED Administration & Sustainable Design Practices
- Power Generation, Cogeneration & Fuel Cells
- Energy Modeling, Utility Rebate Programs & Tax Incentives

Civil/General Engineering

- Comprehensive Feasibility Studies
- Construction Planning, Management, QA/QC
- Drainage Planning, Grading & Design
- Facility Design & Condition Assessment
- Planning & Design
- Property Condition Report

SEQRA Consulting and Planning Services

- SEQRA Process Administration
- 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

Geographical Information Systems/Global Position Systems

- Data Collection & Conversion
- Asset Management
- Digital Elevation Model Analysis
- GIS Applications, GIS/CAD Integration, & Manual Digitizing
- Database Development
- GPS Field Data Collection & Post-Processing
- Image Collection & Image Processing
- Licensed FAA UAV Pilots

A photograph of two yellow CAT excavators working on a construction site. The excavators are positioned on a dirt and rock surface, with one excavator's arm and bucket visible in the foreground. In the background, there is a city street with cars and a bridge. A blue rectangular overlay is positioned in the upper right corner, containing the text "BROWNFIELD SERVICES". The bottom half of the image features a large, stylized blue swirl graphic.

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, LEP and Paul K. Boyce, PE, 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 20+ years working together on 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, assisting in 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.

Prior to entering into the Brownfield Program, PWGC can provide a professional evaluation of the potential tax credits and incentives based upon existing environmental information and the proposed development.



Brownfield Expertise

PWGC has obtained certificates of completion for multiple 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 the preparation and implementation of a Remedial Investigation Work Plan (RIWP), Community Participation Plans (CPPs) 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 pile of debris, including twisted metal and broken concrete. A red fire hose runs across the middle of the site. The background shows more of the demolition area with exposed rebar and concrete structures. A blue semi-transparent banner is overlaid on the right side of the image, containing the text "BROWNFIELD EXPERIENCE & CLIENTS".

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-acre 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's Cove Condominium 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.

PWGC has played a lead role in assisting the site developer with the environmental assessment, remediation and reporting of the assembly of parcels that make up the Garvies Point project. PWGC is currently serving as the joint environmental monitor to RXR Glen Isle Partners, LLC and the Glen Cove Industrial Development Agency for the construction portion of the project.

PWGC acting as the joint environmental monitor serves as the keystone for the project coordinating with the site owners (RXRGIP/GCIDA), site contractors (Posillico/Hunter Roberts/LiRo/InterCounty), and regulatory agencies (NYSDEC/USEPA/NYS DOT) to keep the project on schedule, budget, and in compliance with the detailed environmental plans prepared by PWGC. These plans include detailed and sophisticated Excavation Work Plans, Quality Assurance Project Plans, Site Dewatering Plans, Health & Safety Plans, Community Air Monitoring Plans, etc.

Prior to construction, during evaluation of the site for construction, PWGC worked closely with the NYSDEC and USEPA to develop remedial goals for the site which would allow construction for restricted-residential use. As part of this process, PWGC performed a sophisticated investigation of the site which allowed for the modeling of soil and groundwater quality throughout the redevelopment area. PWGC in conjunction with the NYSDEC and USEPA utilized this data to evaluate potential impact to groundwater levels of constituents which was utilized to establish site specific cleanup goals that would be both protective of health and environment.

Construction has been completed one condominium building, two mixed-use buildings, two commercial buildings, open landscaped areas, new roadways, and PWGC has coordinated with the NYSDEC, NYSDOH, and USEPA to allow occupancy while construction of the remainder of the project continues.

Brownfield Cleanup Program - 355 & 399 Exterior Street., Bronx, NY

The 355 Exterior Street Site and 399 Exterior Street Site Brownfield Cleanup Program sites are a \$350 million, 0.6-acre mixed use development along the East bank of the Harlem River. Representing a significant component of the governor's initiative to increase housing in the State of New York, the planned development includes multiple floors of residential units including both market rate and affordable.

PWGC has assisted the site developers in the initial acquisition of the projects by performing environmental due diligence. Upon discovery of environmental site impacts, PWGC completed Brownfield Cleanup Program applications for both sites. Once Brownfield Cleanup Agreements were executed, PWGC further characterized site impacts through remedial investigations and developed remedial alternatives for the sites. Remedial Action Work Plans have been approved for both sites and PWGC is currently managing, overseeing, and documenting compliance with the plans under oversight of the New York State Department of Environmental Conservation.



BROWNFIELD PROJECTS

Brownfield Cleanup Program – Former Liberty Brass Site., Bronx, NY

The Former Liberty Brass Site is a New York State BCP site and a redevelopment project in Queens, New York. The site was accepted into the New York State Brownfield Cleanup Program in December 2015. PWGC directed and oversaw a Remedial Investigation and the preparation of a Remedial Investigation Report, the preparation and implementation of a Remedial Action Work Plan, and the drafting and submission of a Final Engineering Report and Site Management Plan under NYSDEC oversight. Site remediation included demolition of the historic building, excavation and proper removal and off-site disposal of tanks, a subsurface drainage and piping system, and the installation of vapor mitigation measures. The remediation of the site achieved a conditional Track 1 cleanup and received a Big Apple Brownfield Award for Environmental Protection from the New York City Office of Environmental Remediation. The site is currently undergoing environmental site management procedures that are coordinated by PWGC. The full site development plan consists of a commercial building consisting of retail, office, and community facility space.

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

The Former Canine Kennel Site is a New York State BCP site and inactive hazardous waste disposal site which consists of a one-acre portion of Francis S. Gabreski Airport in Westhampton, New York, a former US Air Force base that was given to Suffolk County. The site is located within the Core Preservation area of the Central Pine Barrens.

During US Air Force deactivation prior to transferring the property to Suffolk County, the Former Canine Kennel Area was used for the disposal of PCB containing electrical distribution equipment such as transformers and capacitors. To satisfy the requirements of the BCP and inactive hazardous waste disposal site program, 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. Following completion of the RI, PWGC performed an interim remedial measure (IRM) to address surface soils impacted with PCBs at an adjacent site and removal of continuing sources of PCB contamination. The final remedy for the site included the removal of over 1,000 tons of PCB impacted soil and debris, collection of over 200 confirmatory endpoint samples and installation of a one-foot cap of clean fill material. As part of remediation, PWGC prepared a Self-Implementing Cleanup Plan for PCBs for submittal to USEPA to allow for PCB impacted soils below a certain threshold to be disposed of as non-hazardous waste. Following completion of remedial activities, PWGC prepared a Final Engineering Report (FER), which documents soil remediation, and evaluates PCB impact and migration in groundwater, and Site Management Plan (SMP), which details the operation and maintenance of engineering controls and institutional controls implemented at the site and specifies a proposed scope of work for long term monitoring of PCB impacted groundwater at the site. The draft FER and SMP are pending approval by NYSDEC.

Brownfield Cleanup Program – Jay's Lucky Cleaners, Oceanside, NY

Jay's Lucky Cleaners is a strip mall located in a mixed commercial/residential area that has been used as a dry cleaner since the 1950s. PWGC is managing remediation of the property under the BCP. PWGC has implemented an RI at the site which has identified PCE impacted groundwater both on and offsite, PCE impact to soil vapor beneath the existing building and at the property boundary abutting residential properties, and PFAS impacted groundwater beneath the site. Following the RI, PWGC implemented an IRM consisting of the design and installation of a sub-slab depressurization system (SSDS) to mitigate soil vapor intrusion within the existing building and limit off site migration of impacted soil vapor. Currently, PWGC is implementing a Supplemental RI at the site to further evaluate PFAS impact and has prepared a draft Remedial Action Work Plan (RAWP) which has been tentatively approved by NYSDEC pending the result of the Supplemental RI. The remedial plan for the site includes in-situ bioremediation injections to address impacted groundwater and implementation of a Site Management Plan to govern long term groundwater and soil vapor monitoring. Currently NYSDEC approval of the RAWP is pending.



BROWNFIELD PROJECTS

Brownfield Cleanup Program – Commander Oil, Oyster Bay, NY

Commander Oil Terminal is a former MOSF since the 1930s and was historically used as a sawmill, coal yard and ice plant prior to that. The site is located on the waterfront in Oyster Bay adjacent to White's Creek. The site is being investigated and remediated under the BCP. Based on PWGC's RI, environmental issues at the site include petroleum impact to soil and groundwater throughout the property related to the property's usage as a MOSF, as well as TCE impact to soil and groundwater beneath the central portion of the site related to a former leaking chiller unit that was used in conjunction with gasoline storage tanks at the site. Preliminary redevelopment plans for the site include decommissioning of the existing MOSF and construction of a mixed-use commercial/residential development. Currently, NYSDEC approval of the RI Report is pending.

Brownfield Cleanup Program – 2840 Atlantic Avenue, Brooklyn, NY

This property is a former industrial facility that produced dairy products for most of the twentieth century located in the East New York Neighborhood of Brooklyn, New York. PWGC was hired by the developer to oversee a multi-track environmental remediation that consisted of the removal of PCB, SVOC, and metal impacted soils from the majority of the site to meet unrestricted use cleanup objectives. A small portion of the site where a 20,000-gallon underground fuel oil tank had leaked was addressed with a restricted-use cleanup that included the removal of petroleum spill source material and the installation of product recovery wells to continue to remove the free product at the water table.

PWGC was successful in managing the remediation of the site in accordance with the BCP's demands and finalized the final engineering report and site management plan before the end of the calendar year so the developer could obtain their Certificate of Completion. PWGC's responsiveness and preparedness enabled the client to claim the BCP tax credits without unnecessary delay.



BROWNFIELD CLIENTS

DEVELOPERS	MUNICIPALITIES
• 3140 Coney Island Realty, LLC • 4720 VCD LLC • 60 Alexander Street Development LLC • Avery Hall Investments • BEB Capital • Brooklyn Urban Retail Partners, LLC • Commander Terminal Holdings LLC • Douglas Development • GC Fordham Road Development, LLC • RXR Realty • Sky Blu Holdings • The Lightstone Group • Totem • United Properties Corp.	• City of Glen Cove • Suffolk County Department. of Public Works • Suffolk County Department of Health