



ENVIRONMENTAL CONSULTING & ENGINEERING SERVICES STATEMENT OF QUALIFICATIONS

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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.



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 Inspections

- 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



An aerial photograph of a large-scale construction project. Several tall yellow tower cranes are positioned around the site, which features multiple concrete foundations and partially completed building frames. The ground is a mix of dirt, sand, and construction materials. In the background, there are some green spaces and existing residential buildings. A semi-transparent blue banner with white text is overlaid on the right side of the image. The bottom half of the image is covered by a large, semi-transparent blue graphic consisting of concentric circular arcs.

ENVIRONMENTAL CONSULTING & ENGINEERING SERVICES

ALTERNATIVE FUELS

Why Use Alternative Fuels?

The public and private sectors continue the drive to replace conventional diesel and gasoline dispensers with alternative fuels to help improve the environment and increase the country's energy independence. Retail service station owners looking to accommodate a greater range of customers are adding ethanol-85 (E85) and biodiesel to their inventories. Fleet managers have found that replacing diesel and gasoline powered vehicles with those that can run on compressed natural gas (CNG) or hydrogen not only reduces air emissions but fuel costs as well.

Applying Knowledge and Insight

Applying its expertise, PWGC acts as your advocate with partners, contractors, and regulatory agencies. We will work with you to design, permit, and oversee construction of a new alternative fuel station or integrate alternative fuels equipment with an existing fueling station. Our expertise in alternative fuels includes:

- Equipment Specification
- Fueling Station Planning and Design
- Construction Observation
- Facility Testing
- Commissioning for Retail Service Stations and Fleet Operations

PWGC is knowledgeable of the alternative fuels industry and emerging national codes and standards for alternative fuels equipment and station design.



AVIATION

PWGC: Quality Environmental and Engineering Solution

The aviation industry, like many businesses, is aware of the benefits of protecting and enhancing the environment in which it works and operates. Managing fueling activities in a responsible way not only helps to reduce the negative impacts on the environment, but significantly reduces production costs.

PWGC will work with you to integrate best environmental practices into key areas related to aviation fueling storage and delivery, which benefits the environment and the bottom line.

PWGC's Knowledge and Insight

PWGC acts as your advocate with partners, contractors and regulatory agencies. PWGC's experienced specialists are intimately familiar with the details associated with regulation application, knowledge that can allow you to cost-effectively meet environmental compliance obligations. An added benefit: These efforts can enhance your image with your community and associated regulatory agencies.

PWGC's Expertise

- Environmental Compliance Review
- Regulatory Compliance Reporting
- Air Quality (Title V Permitting, Air Emission Inventories, Tier II & TRI Reporting)
- Contingency Plan Development & Updates (SPCC, SWPPP, FRP)
- Stormwater Management
- Hazardous Waste Management
- Chemical/Petroleum Bulk Storage Tanks (Permitting, Inventory & Management)
- Remedial Project Management, Investigation, Design, Site Closure
- "Best Economic Alternatives" Evaluation
- Site Planning & Design
- Construction Management
- Drainage Planning, Grading & Design
- OWS Planning & Design
- Fire, Power Outage, Severe weather/flood
- Chemical/Biological Emergencies
- Terrorists Incidents
- Fuel Storage Facility
- Mobile Fuel Equipment
- Geothermal System Design
- CNG Design, Permitting, Construction Services
- Power Generation
- Fuel Systems Design, Permitting & Compliance
- Emissions Reduction
- Sustainable Treatment & Distribution Systems
- Carbon Footprint Assessment



BROWNFIELD SUPPORT SERVICES

What are Brownfields?

A brownfield is a property where redevelopment may be complicated by the presence, or potential presence, of a hazardous substance, pollutant, or contaminant. In an effort to promote the redevelopment of such parcels, New York State and Federal Brownfield programs have been implemented and changed the way many contaminated properties are viewed. Benefits of remediating and reinvesting in these types of properties include:

- Increasing the tax base
- Facilitation of job growth
- Utilization of existing infrastructure
- Relief of development pressures on undeveloped open space
- Environmental improvement and protection

PWGC's Skill Set

PWGC is a premier brownfield consultant serving the New York City metropolitan area, providing services related to the environmental restoration of impacted sites to a diverse range of clientele for three decades. Our clients range in size from the independent land owners to large private development interests, municipalities, and institutional clients. To restore properties to effective use, PWGC has developed a full-compliment of technical services that include:

- Site Assessments and Phase I & II ESA's
- Accelerated Site Characterizations
- Development of Remedial Programs
- Preparation of Risk-Based Remedial Plans and Site Closures
- Development of Specifications for Detailed Remedial Design
- Incorporating Engineering Controls into Redevelopment Plans

PWGC has the experience and expertise to perform the consulting necessary and prepare the required documents, including Brownfield Cleanup Program (BCP) applications, which are required to gain entry into the program. It will then be decided if the applicant can enter as a volunteer or participant, which impacts the work required and New York State Department of Environmental Conservation (NYSDEC) costs. PWGC is experienced in preparing Remedial Investigation Work Plans (RIWP), Interim Remedial Measures (IRM) Work Plans, Remedial Investigation Reports (RIR), Remedial Action Work Plans (RAWP), Alternatives Analysis Reports (AAR), Site Management Plans (SMP) and a Final Engineering Reports (FER).



CARBON FOOTPRINT

What is a Carbon Footprint?

Carbon Footprint is a measure of the exclusive total amount of carbon dioxide emissions that is directly and/or indirectly caused by an activity or is accumulated over a product's life stages.

Why Calculate your Carbon Footprint?

Nearly all facets of the commercial and residential real estate markets face increased pressure from the public, clients, media, government, and investors to report their corporate policy for reducing carbon emissions and implementing environmentally sustainable operations. Benefits to calculating your carbon footprint include:

- Business sustainability as part of corporate responsibility
- Compliance with customer/investor requests
- Develop strategies for operational cost savings
- Public relations & marketing
- Establishing your firm as a leader in green initiatives in your industry
- Being at the forefront of regulatory changes
- Establish a baseline year from which emission credits can be applied
- Qualify for regulatory issued carbon credits
- Receive potential monetary value for reduced emissions

PWGC can develop your baseline carbon emissions profile through the comprehensive analysis of your corporation's day-to-day activities, which can contribute to causing greenhouse gas emissions. PWGC does this by using protocols based on The Climate Registry. These include the following:

- Direct Emissions (Scope 1) - On-site fuel combustion fugitive refrigeration emissions.
- Indirect Emissions (Scope 2) - Electricity consumption, imported steam, and heating.
- Indirect Emissions (Scope 3) - All other emissions (Personnel Transportation & Travel, materials purchased, and waste). Scope 3 is currently not required if submitted via the Climate Registry.

With PWGC's carbon emissions analysis you will be able to integrate proactive guidelines into your corporate policy, develop strategies to reduce operational costs, and assess your long-term return on investments of going green.



CIVIL SITE ENGINEERING

Civil site engineering represents one of PWGC's largest market segments. As a result, some of our most senior and experienced principals and associates are involved with this sector. Our civil site experience ranges in size from smaller-scale residential and commercial sites to regionally significant projects for the public and private sector, including institutional, retail and residential development.

PWGC recognizes that each real estate development project has its own identity, which requires the custom application of civil site design expertise depending on client objectives, site conditions and regulatory requirements. Our approach to civil site engineering is based on extensive discourse with the client to ensure an appropriate design that will meet project objectives is drafted.

PWGC provides Civil Site Design and Engineering services that include the following:

Pre-Design Services

- Site Assessment/Inspection
- Feasibility Studies
- Schematic Plans/Sketches
- Environmental Assessments
- Environmental Impact Statements
- Zoning Analysis
- Change of Zone/Variance Applications
- Floodplain and Wetland Investigation
- Wetland Permitting
- Hydrological Studies
- Yield Mapping
- Traffic Letters and Studies

Design and Engineering

- Foundation Engineering
- Site Removal and Demolition Plans
- Site Plans and Master Plans
- Grading and Drainage Plans
- Builders Pavement Plans
- Stormwater Management Design
- Stormwater Permitting and Compliance
- Wastewater and Sanitary Engineering
- Utility Plans, Location and Coordination
- Approvals and Permitting
- Water Supply Design
- Electrical and Mechanical Support

Construction Services

- Project Management
- Construction and Bidding Documents
- Specifications
- Construction Cost Opinions
- Community Meetings
- Stormwater Pollution Prevention Plans
- Construction Observation
- Shop Drawing Review
- Bid Analysis
- Certifications for Municipal Acceptance
- Construction Inspection
- Construction Administration



The Ross School, East Hampton, NY

ENVIRONMENTAL COMPLIANCE

PWGC works closely with clients and regulatory agencies to expedite projects, maintain compliance, and eliminate or limit unforeseen project delays. We are committed to using our expertise and available technologies to meet our clients goals.

PWGC works diligently to ensure environmental compliance goals are met on all of our projects, including those related to the following:

- Regulatory Compliance Reporting
- Regulated Waste Management Audits/Reporting
 - Hazardous Waste
 - Universal Waste
 - Regulated Medical Waste
- Environmental and Health Risk Assessment
- UST/AST Management
- Site Selection and Planning
- Environmental Assessments/Environmental Impact Statements
- Preliminary and Final Closure Plans
- Remedial Action Plans and Implementation
- Post-closure Environmental Monitoring and Maintenance

Air Quality Services

- Title V Permitting
- Air Emissions Inventories
- TRI Reporting
- Radiological Emissions

Contingency Plan Development

- Spill Prevention, Control, and Countermeasure plans (SPCC)
- Storm Water Pollution Prevention Plans (SWPPP)
- Facility Response Plans (FRP)
- Hazardous Waste Contingency Plans

PWGC clients include a myriad of public and private entities both locally and nationally. PWGC's provides high-quality, professional environmental compliance services on-time, and on budget.



GEOTHERMAL SYSTEMS

Why Consider a Geothermal System?

Geothermal heat pump (GHP) technology is an established, energy-efficient option to meet the heating and cooling requirements of for a variety of interior spaces, both commercial and residential. Compared to conventional HVAC systems, GHP systems offer the following benefits:

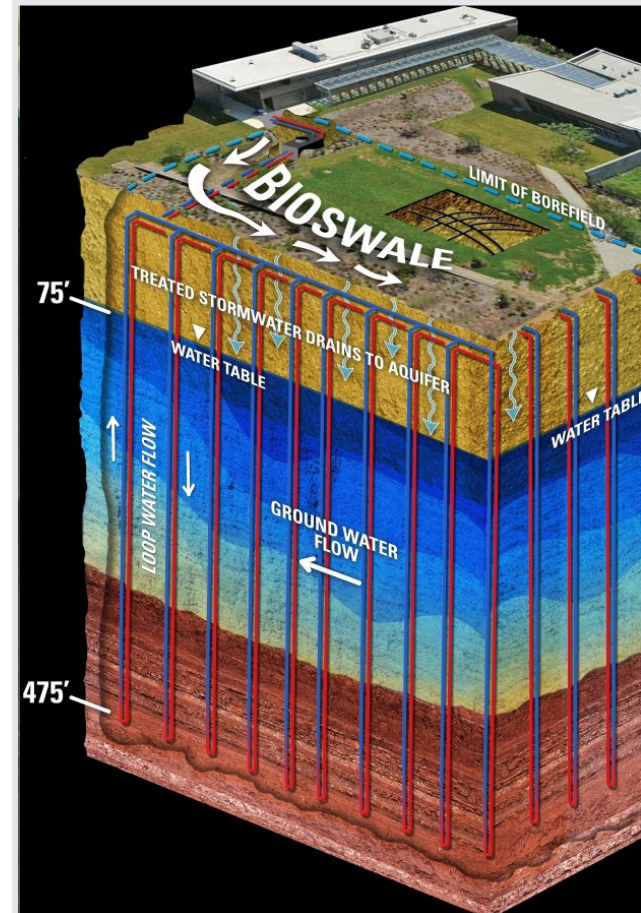
- Lowest life-cycle cost of all HVAC systems
- Eliminates chillers, cooling towers, and furnaces
- Eliminates on-site fossil fuel storage and use
- Reduced carbon footprint
- Improved indoor air quality and smaller mechanical rooms
- Contributes points towards LEED certification
- No outdoor equipment

Applying Knowledge and Insight

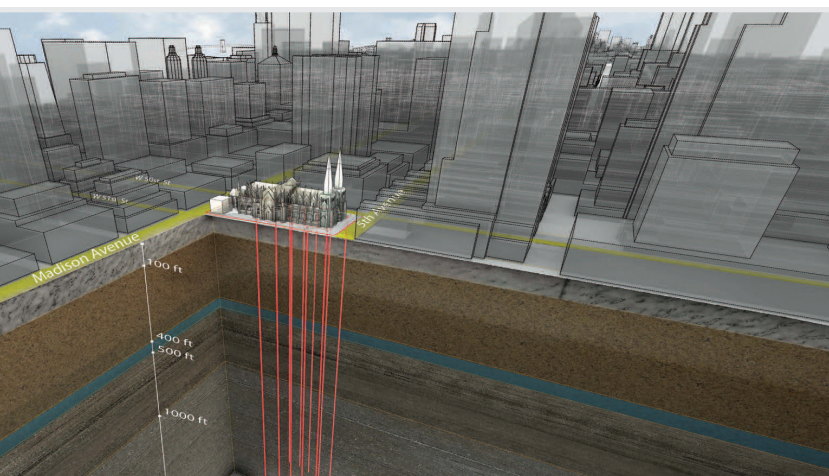
PWGC will analyze whether GHP technology is a match for a proposed application. There are multiple ground coupling options for a particular site, with a number of criteria to consider when selecting the most cost-effective option. Our GHP design and engineering expertise includes the following:

- Geologic/hydrogeologic conditions due diligence
- Feasibility and cost analysis and filings support
- Field testing programs
- Design and construction management
- System start-up, operation and maintenance

PWGC provides these services for a wide range of commercial, institutional, educational and residential clients. We are at the cutting edge of the growing geothermal industry and can lead you through each step towards evaluating, choosing and implementing this emerging technology at your project site.



Weeksville Heritage Center, Brooklyn, NY



St. Patrick's Cathedral, New York, NY

GEOGRAPHICAL INFORMATION SYSTEMS

PWGC's GIS and data management expertise enables us to present relevant, thought-provoking data, answer challenging spatial questions, and solve our clients' needs efficiently and accurately.

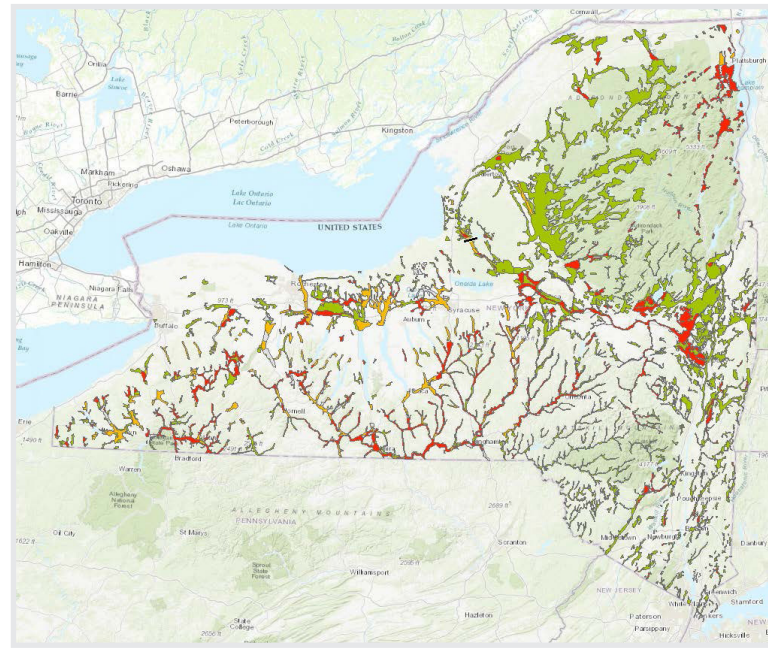
GIS can be a valuable component on a wide range of projects: environmental site assessment, natural resource damage assessment, geothermal systems planning, E-Designation, invasive species removal, stormwater and wastewater utility, Brownfield Cleanup, and redevelopment projects. With these projects, PWGC uses GIS to combine, query, analyze, and visualize spatial data, allowing our staff to make insights and inform decisions.

Our mapping works in sync with our field staff who operate high accuracy GPS equipment and cutting-edge drone technology. Our FAA licenses pilots collect aerial imagery and topographic data and can quickly and accurately calculate volumes, draw cross-sections, and track site changes. All the data we collect and receive can be passed seamlessly through ArcGIS, AutoCAD, Microsoft Office Suite, and Enviro Data (Access based data management software). We accept, translate, produce, and share data in many file formats.

Our GIS team will work diligently to satisfy your specific project requirements and provide you with valuable maps that tell a story.

GIS Capabilities

- ArcGIS Desktop
- Spatial Analysis
- Customized GIS Models
- Data Management
- GIS & CAD Integration
- ArcGIS Online - Web Application
- Database Development
- Public Data Collection
- Needs Assessment
- Calculate Contours
- Digitize Paper Documents
- Technical Support
- Georeferencing
- Lab Data Integration
- Electronic and Hard Copy Deliverables
- Coordinate Data Sharing Agreements



GEOTECHNICAL ENGINEERING SERVICES

PWGC offers a wide range of geotechnical engineering services to our clients on Long Island, New York City and the Tri-State area. We specialize in preliminary and design level investigations for residential, commercial municipal/infrastructure construction. Our professionally licensed and highly experienced engineers work to provide you with practical, cost-effective solutions that are tailored to your unique site and soil conditions. We work with expert contractors that are capable of performing geotechnical investigations for new construction or renovations utilizing conventional and specialized exploration equipment. We proudly offer the following services:

- Subsurface investigations utilizing soil borings, test pits, and cone penetrometer tests
- Recommendations on shallow and deep foundation design
- Knowledge of local, New York State and New York City Department of Buildings building codes and permitting
- Pavement design recommendations
- Design of permanent and temporary dewatering systems
- Slope stability analysis
- Retaining wall and Support of Excavation Walls
- Design of Marine and Coastal Structures
- Construction observation and monitoring

Our geotechnical reports provide vital information to be used by the owner, architect, design engineer and/or contractor. We provide evaluations on soil conditions, local history, foundation design parameters, settlement, groundwater levels, geotechnical hazards and seismic risk. These recommendations can save project design and planning time/costs by identifying unexpected soil conditions or hazards. We strive to work closely with the design team to meet project objectives and timeframes. PWGC's geotechnical capabilities are a strong compliment to the other engineering, environmental and geothermal services we offer.



HYDROGEOLOGY AND REMEDIATION

PWGC's staff of environmental scientists and engineers have the expertise and experience to successfully complete environmental investigations, including site review, design, operation and maintenance, and closure.

Professionals in the real estate, financial, and consulting industries rely and benefit from PWGC's cost-effective and innovative site remediation strategies. PWGC provides a value-added service through the evaluation of remediation alternatives and associated costs. We then match the strongest alternative that aligns with our client's goals.

PWGC conducts investigation and design activities related to hazardous waste management, hydrogeology, and remediation including the following:

- Remedial Investigation and Feasibility Studies
- Identification of Concentration and Extent of Contamination
- Selection and Design of Systems to Remediate Contamination
- Computer Modeling of Contaminant Fate and Transport
- Preparation of Work Plans, and Health and Safety Plans
- Health and Ecological Risk Assessments
- Regulatory Liaison and Negotiations
- Design, Construction Administration, and Inspection of a Remedial System
- Subcontractor Management and Review of Bids
- Preparation of Operation and Maintenance Manuals
- Operation and Maintenance of remedial System
- Site Closure Reports



Freeport Electrical Power Plant 2, Freeport, NY



Freeport Electrical Power Plant 2, Freeport, NY

INSURANCE

PWGC's commitment to act as an advocate for our insurance clients, coupled with our solid understanding of the complex requirements unique to the industry, translate into measurable client benefits.

What sets PWGC apart from the competition is our commitment to providing quality technical services to insurers, law firms, and financial institutions related to the formulation of cost models and/or the evaluation of costs for environmental claims.

PWGC's experienced personnel produce scientifically-proven data that is documented and utilizes to reach regulatory-approved conclusions that can reduce liability and quickly distinguish between covered and non-covered issues.

PWGC senior personnel has been successful in utilizing their technical expertise and regulatory background to present findings effectively to involved parties.

PWGC provides superior service and professionalism at every level, including the following:

- Preparation of engineering evaluations of residences
- Oversight of residential petroleum releases
- Evaluations, sampling, and remedial protocol for mold
- Management for cost-effective petroleum spill closure



LEED CONSULTING

Why Go Green?

Research shows that the built environment, notably buildings, businesses and industrial processes have an enormous impact on our natural resources, the economy, health and productivity. Benefits of going green include the following:

- **Environmental Benefits:** improving air and water quality, reducing solid waste and conserving natural resources.
- **Economic Benefits:** reducing energy and operating costs, enhancing asset value and profits by optimizing public relations and marketing, improving employee productivity, comfort, health and satisfaction.
- **Health and Community Benefits:** improving air, thermal and acoustic environments, minimizing strain on local infrastructure and improving the quality of life.

Applying Knowledge and Insight

To integrate green initiatives, PWGC will work with you to establish a baseline by assessing existing processes and recommending profitable green practices in areas of energy usage, water usage, waste water generated, materials usage and waste minimization.

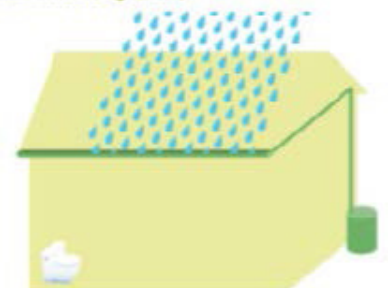
If your goal is to obtain LEED (Leadership in Energy and Environmental Design) certification from the U.S. Green Building Council, PWGC can assist you in the following LEED categories:

- **Sustainable Sites:** PWGC specializes in Civil/Site Design to obtain the most LEED points in:
 - Site selection,
 - Erosion and Sedimentation Control,
 - Brownfield Redevelopment,
 - Alternative Transportation, and
 - Storm Water Management.
- **Water Efficiency:** PWGC specializes in Civil/Sanitary Design to obtain the most LEED points in:
 - Water Efficient Landscaping,
 - Innovative Wastewater Technologies, and
 - Water Use Reduction.
- **Energy & Atmosphere:** PWGC specializes in Civil Engineering to obtain the most LEED points in:
 - Energy Efficient Geothermal Systems.

Sustainable Sites (SS) and Location & Linkages (LL)



Water Efficiency (WE)



Energy & Atmosphere (EA)



MINE DEVELOPMENT & PERMITTING

Strategic Modeling, Development & Compliance Services for the Resources Sector

PWGC provides a complete range of mine development and permitting services for a variety of different clients across New York State's mining industry. Our engineering and environmental group has experience working the New York State Department of Environmental Conservation (NYSDEC), as well as local municipalities and interest groups, and can help your team navigate the mine development and permitting requirements.

PWGC provides the following services:

Mining Development & Permitting Services

- Reserve Analysis
- MLR Permit Applications, Modifications, & Renewals
- Drone Flights for Topography, Photogrammetry, Stockpile Volumes, and Slope Stability
- Spill Prevention, Control and Countermeasure Plans
- Stormwater Pollution Prevention Plans, SPDES Permitting, Stormwater Management and Compliance
- NYSDEC Ccompliance Support
- Hydrogeologic Investigations
- Land Development Design, including Site Plan Development, Design, and Permitting
- Water Quality Modeling and Monitoring Services
- Sound Level and Noise Monitoring
- NYSDOT Source Reports and Approvals
- Water Withdrawal Permits and Reporting
- Air Registration, Permitting and Compliance

Operational Compliance

- Run-off Control and Handling
- Stockpile Calculations
- Accurate Evaluation of Remaining Materials
- Ensure Proper Sloping of Stock-piles and Excavation
- Berm Locations and Size
- Potential for Additional Income and Maximize Profits
- Additional Locations for Excavation Operations
- Optimize Site Layout of Stock-piles and Traffic Patterns

Aerial Imagery & Modeling

- Remote Sensing
- Modeling
- Elevation contours
- Volume calculations (stockpiles, cut + fill)
- 3-D renderings and site models
- Point cloud models of structures to evaluate integrity
- Site Inspections and Monitoring
- Regulatory Compliance



MOLD INSPECTION

Mold growth within a structure has the potential to cause property damage and negatively impact the health of the occupants severely, which can range from immunological and toxic effects, to infectious diseases, to the need for medical evaluation and relocation.

PWGC's mold specialists and engineers are trained and experienced with conducting inspections, taking samples, and after analysis work with clients to develop an effective strategy for remediation.

Our goal is to determine the underlying cause and extent of the mold growth within a given structure or specified area to provide our clients with cost-effective solutions that remedy the mold problem and its underlying causes.

PWGC collects the appropriate samples to determine the extent of mold growth and its impact on indoor air quality. PWGC's mold specialists perform all required services in accordance with New York City's Department of Health (DOH) policies for medical and environmental evaluation and intervention procedures to address mold contamination.

PWGC mold inspection services include the following:

- Environmental Assessments (Visual Inspection, Bulk/Surface Sampling, Air Monitoring, Environmental Samples Analysis)
- Inspection of Structures for Causes/Extent of Mold Growth
- Collection of Surface and Air Samples for Mold
- Preparation of Mold Inspection Reports & Remedial Protocols
- Remediation Contractor Oversight (QA/QC)
- Post Remedial Clearance Sampling & Reporting



SITE ASSESSMENT FOR REACTOR DECOMMISSIONING

PWGC performs Preliminary Assessment/Site Inspection (PA/SI) in accordance with U.S. Environmental Protection Agency guidance. The purpose of the PA/SI is to identify potential environmental vulnerabilities and evaluate and determine if they warrant a designation as an Area of Interest (AOI). Sampling and/or further investigation is performed under the SI phase of the project for each AOI.

The preliminary assessment is categorized into four separate plans that include the following:

- Work Plan
- Health and Safety Plan
- Sampling and Analysis Plan
- Waste Management Plan

PWGC's PA/SI services include the following:

- Site mobilization/demobilization
- Site survey and reconnaissance
- Surface soil sampling
- Groundwater and subsurface soil sampling

After data has been collected, PWGC prepares a report that summarizes activities and provides recommendations for additional actions, as appropriate. Our skill set related to reactor decommissioning was developed by working extensively at Brookhaven National Laboratory in Upton, NY.

REAL ESTATE

PWGC maintains positive working relationships with a variety of real estate-related clients that include developers, attorneys, insurance companies, architects and community associations. PWGC provides expertise related to the development of environmental impact studies, indoor air quality, permitting, site development issues, and construction administration.

With our extensive regulatory background, PWGC is able to clearly define specific environmental concerns, if any, and formulate regulatory agency-approved solutions for a given project, which helps our clients avoid unexpected delays and unnecessary costs.

PWGC's comprehensive real estate services include the following:

- Brownfields Redevelopment
- Cost to Cure Estimates
- Permitting
- Lead/Asbestos Evaluation
- Petroleum Clean-up Oversight
- Phase I and II Environmental Site Assessments
- Water Resource Issues
- Expert Testimony
- Site Plan Application Drawings



RISK-BASED SOLUTIONS

PWGC specializes in risk-based corrective actions and monitored natural attenuation (MNA) using risk assessments to analyze chemical exposures and predict the likely consequences of future exposures. PWGC has decades of experience in determining appropriate soil and groundwater action and cleanup levels based on U.S. Environmental Protection Agency (EPA) risk-based concentrations on a myriad of projects.

PWGC's range of projects include remedial investigation/feasibility studies (RI/FS), asbestos surveys, lead-based paint inspections, site characterization, remediation of facilities and site grounds, and contamination studies. We utilize experienced professional engineers, geologists, hydrogeologists, and environmental scientists to provide the level of technical support necessary for PWGC's wide range of environmental projects and clients.

A risk-based approach performed by PWGC generally consists of the following components:

- Identification of Source Areas
- Determination of Affected Medium and Site Hydrogeology
- Identification of the Contaminants and their potential Health Risks
- Estimation of Biodegradation and Attenuation Role Constants
- Determination of Exposure Scenarios and risk to receptors, if any
- Evaluation of Risk -based corrective actions, if appropriate
- Verification Monitoring

PWGC provides a wide variety of technical services related to risk-based assessment. We are dedicated to providing quality and cost effective services to public and private sector clients utilizing integrated approaches to meet today's environmental issues.



SEQRA SERVICES

PWGC provides environmental and land use consulting services for projects subject to local, state and/or federal environmental and land use regulations. PWGC can assist clients in the early stages of project planning by identifying potential environmental and land use constraints or sensitivities. All of PWGC's SEQRA work is led by Vice President Kim Gennaro-Oancea, MS, AICP CEP who has decades of experience providing these services.

PWGC works with technical specialists to create plans that comply with the environmental and land use regulations, and are consistent with community goals.

PWGC has extensive experience with the SEQRA process and requirements, as well as related local, state and federal permitting.

PWGC SERVICES

- Preparation of environmental assessments, environmental impact statements, determinations of significance, and related documents/analyses.
- Permitting and compliance services – federal- and state-regulated wetlands and adjacent areas, floodplain development, coastal management zones, other designated critical environmental areas, and historic resources/ Section 14.09 compliance
- Land use and zoning assessments.
- Expert testimony and public presentations.

MARKETS SERVED

Public School Districts and Libraries

PWGC assists Boards with the administration and management of the SEQRA process, prepares the requisite environmental analyses and environmental permit applications for construction and alteration projects, coordinates with interested and involved agencies, and participates in public meetings.

Municipalities and Special Districts

As the environmental and planning consultant, PWGC reviews and prepares environmental and planning-related documents, determinations and notices. PWGC also assists with the administration of the SEQRA process for the lead and involved agencies, and participates at public meetings or hearings.

Retail, Commercial, Educational and Residential Applications

PWGC assists in the preliminary planning phase of all projects, prepares environmental assessments, environmental impact statements and related documents, as well as assists with obtaining required permits.



STORMWATER MANAGEMENT

PWGC has the technical expertise to provide a full spectrum of stormwater management services. Our clients appreciate our high quality standards and one-on-one project management approach for meeting general permit requirements, governing regulations, regulatory trends and authorities.

Stormwater Management Expertise

The New York State Department of Environmental Conservation (NYSDEC) State Pollutant Discharge Elimination System (SPDES) General Permit for Storm Water Discharges from Construction Activity (Permit No. GP-02-01), including provisions for developing a storm water pollution prevention plan (SWPPP).

A SWPPP must be developed for construction sites with land disturbances of one or more acres. The purpose of a SWPPP is to maximize the potential benefits of pollution prevention as well as sediment and erosion control measures.

To implement successful SWM programs PWGC prepares site specific studies, develops a site design and SWPPP, which would be integrated as efficiently as possible and would be available for regulatory approval if necessary.

To expedite project success, PWGC works with its clients to incorporate construction schedules into SWPPP application, designing it with the practical aspect of construction in mind while maintaining a focus on environmental compliance.

Our expertise in construction administration will help speed installations. Our design teams quickly evaluate alternatives to solve issues and implement the most effective solution. Clients can be assured PWGC's work will satisfy regulatory requirements. Our knowledge of local and regional regulatory requirements and our access to key decision makers give PWGC's clients the confidence that the work was done properly.

PWGC's SWM services include:

- Site development, redevelopment, planning
- Stormwater drainage design and retrofits
- SPDES Permit Compliance/SWPPP Preparation
- GIS integration
- Construction Administration/Observation
- Regulatory Liaison



TANK MANAGEMENT

PWGC has developed a comprehensive storage tank management program for underground storage tanks (UST) and above-ground storage tanks (AST) based on our expertise and experience with storage tank systems, which provides for regulatory compliance; early leak detection; minimization of contamination; protection of property value; prioritization of spending, and assessment of tank facilities prior to purchase, removal, or abandonment. PWGC has tank experience associated with heating oil, gasoline with MTBE, diesel, kerosene, waste oil, aviation fuels, motor oil and chemicals.

PWGC takes a proactive approach to strategic tank management plans, which enables our clients to maintain regulatory compliance; implement effective new leak detection programs; and upgrade, retrofit, or install a new storage tank system. PWGC's knowledge of the most recent and proposed regulations; technology; and current industry codes, standards, and practices allows clients to comply in a cost-effective and timely manner. Our UST and AST services include the following:

- Regulatory Compliance, Inspection, and Reporting
- Upgrade or Retrofit of Existing Tanks Using Appropriate Technologies
- Installation of State-of-the-Art Testing Equipment
- Corrosion Analysis and Installation of Corrosion Protection Devices
- Tank Testing
- Leak Detection Compliance Support
- Storage Tank Closures (Removal or Abandonment-in-Place) including Soil Sampling and Analysis
- Education and Training
- Hydrogeologic Investigation
- Petroleum Hydrocarbon Remediation
- Off-site Treatment and Disposal of Contaminated Soil



UNDERGROUND INJECTION CONTROL CLOSURE

In accordance with the U.S. Environmental Protection Agency (EPA) Underground Injection Control (UIC) program, PWGC customizes each UIC project to meet the needs of our clients and meet the stringent requirements associated with the UIC program. Some of the New York City metropolitan region's largest municipalities trust PWGC to review their UIC's and maintain regulatory compliance.

Typically, UIC closures involve the following services:

- Preparation of a closure plan for submittal to the EPA for approval. The plan details the nature and extent of the floor drain(s), characterization of the floor drain(s), and evaluation as to whether remediation is required.
- PWGC performs a floor drain characterization, which is done by sampling the structure under the supervision of appropriate regulatory agency personnel.
- Following laboratory analysis, PWGC prepares a closure letter documenting the sample collection and results. In the event that the laboratory analysis indicates that the samples are contaminated, remediation prior to final closure may be required.

UIC closure investigations have been performed for many clients throughout New York State. Since each particular UIC project may vary in the type of analyses or the number of floor drains, PWGC customizes the project to meet the needs of the client in the most responsive and economical manner.



WASTEWATER MANAGEMENT

PWGC works with clients to achieve their wastewater treatment performance and compliance goals in a cost-effective manner. Our personnel have extensive experience in all aspects of wastewater management from facility planning through design, construction, and operation.

PWGC Expertise

- Land Use, Feasibility and Economic Studies
- Site Selection
- Environmental Assessments
- Geographic Information Systems (GIS)
- Wet/Dry Well Stations
- Submersible Type Stations
- Facility Evaluation and Flow Studies
- Upgrade and Rehabilitation
- Sludge Management
- Odor and Air Pollution Control
- Facility Permitting
- Treatability Studies
- Industrial Pre-treatment
- Municipal and Industrial Waste
- Treatment
- Contract Bid Assistance and Analysis
- Construction Management and
- Inspection Services
- Sewer/Interceptor Design
- Infiltration and Inflow Analysis
- Wastewater System Evaluation Surveys and Rehabilitation
- Leaching Pool Systems
- Recharge Basin
- Saltwater Outfall
- Leaching Field Systems

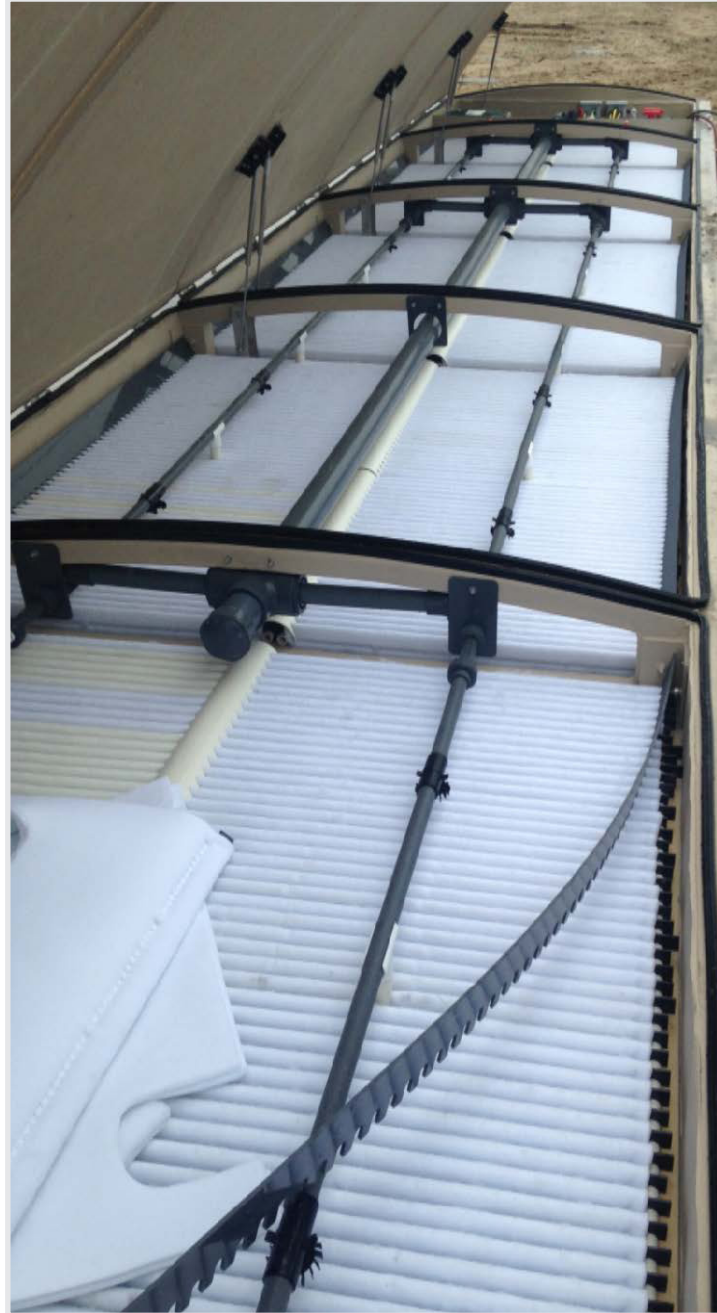


WASTEWATER TREATMENT PLANTS

PWGC's staff of civil and environmental engineers has extensive experience in all phases of wastewater treatment system design, engineering and management from facility planning through design construction and operation. Our range of expertise includes applications related to all types of wastewater collection systems as well as traditional and innovative and alternative on-site wastewater treatment systems (I/AOWTS).

PWGC specializes in the following areas:

- Design
 - Sequential Batch Reactor (SBR) System
 - Activated Sludge Process
 - Convert Rotating Biological Contractors to an SBR System
 - I/AOWTS
- Facility Permitting
- Preparation of O&M Manuals
- Groundwater Monitoring
- Compliance Issues
- Conceptual Planning
- Engineering Studies/Reports
- Wastewater Collection Systems
- Ecologically Engineered Wastewater Treatment Systems - "Greenhouse Technologies"



Meschutt Beach County Park, Hampton Bays, NY

WATER SUPPLY ENGINEERING

Water suppliers that team with PWGC receive a complete range of civil/environmental engineering services. Due to the firm's vast experience, clients are able to minimize operational problems related to issues such as source water contamination, changing regulations, treatment systems, biological activity and storage tanks.

Understanding the client's objective and using latest technology to accomplish that objective is why PWGC has a strong reputation in the engineering field regarding water supply.

Clients benefit from cost-effective solutions like the use of electronic data. With tools such as GIS, PWGC manipulates mapping and digital images to produce accurate plans prior to file verification.

Comprehensive water supply services include:

- Analysis and Projection of Water Demand
- Capital and Operational Long Range Planning
- Water Rate and Connection Charge Studies
- Design of Wells, Water Supply Sources, Treatment Systems, Pumping Stations, Transmission and Distribution Systems and Storage Tanks
- Groundwater and Surface Water Modeling
- Analysis and Prediction of Water Quality Problems
- Water Main Rehabilitation
- Negotiation of Water Quality Sampling Plans
- Construction Phase Services
- Plant Start-up and Training Services
- Electronic Utility Management Services
- Corrosion Control Studies (Lead and Copper Monitoring Compliance)
- Water Conservation Planning

