

## Patricia Morris Bryan, PG President / Principal Geologist

### Technical Specialties:

Brownfields – coordinates environmental assessment and cleanup with redevelopment for municipalities, public agencies and private industry and developers.

Over thirty years of experience in environmental consulting including Phase I and Phase I Environmental Site Assessments, remedial investigations, hydrogeological and geological investigations, UST investigations, brownfield investigations and remediation, risk assessments, and remedial response actions pursuant to the Illinois EPA SRP, TACO and LUST programs as well as other state programs.

Senior Project Manager and Client/Program Manager for public and private sector clients.

### Credentials:

Binghamton University (SUNY Binghamton), B.S. Geology  
University of Houston, Geology

Boston College, Groundwater Hydrology and Groundwater Modeling

### Published Papers:

Author of various presentations on Brownfields investigations, innovative remediation and site closure strategies (Listing attached)

### Professional Affiliations:

Illinois Licensed Professional Geologist, Illinois (#196.000653)

Wyoming Professional Geologist PG-2348

Kentucky Professional Geologist PG-1442

### Professional Memberships

Geological Society of America (GSA)

Association of Environmental & Engineering Geologists, (AEG)

Illinois Board of Licensing for Professional Geologists, Board Member

American Institute of Professional Geologists (AIPG)

AEG Foundation – Past President, Past Executive Director

### Specialized Training

OSHA 40-Hour HAZWOPER & annual refreshers

OSHA 8- Hour Supervisory Course

### Experience

#### Management Experience:

**2014 – Present - Bryan Environmental Consultants, Inc.**

*President and Treasurer/Bryan Environmental Consultants, Inc.*

Responsible for overall management of the company, including business development, project execution, staffing, and financial performance.

*Principal Geologist/Bryan Environmental Consultants, Inc.*

Environmental consulting specializing in Due Diligence, Phase I and II ESAs, Site Remediation, and Brownfields Redevelopment.

**2015 - 2016 – Terracon Consultants, Inc.**

*Senior Associate/Environmental Department Manager*

Manager for Environmental practice in Chicago metro area. Focused on Phase I and II ESAs, CCDD, and Site Remediation services. Clients included developers, banks, universities. Mentor and develop junior, mid-level, and senior staff on all aspects of environmental consulting.

**2013 - 2014 – Roux Associates, Inc., Oak Brook, IL**

*Principal Geologist, Brownfields Practice*

Lead Brownfield Redevelopment practice. Focused on Phase I and II ESAs, Site Remediation. Provided services to municipalities and the public sector in Chicago and Northwest Indiana. Mentor and develop junior, mid-level, and senior staff on all aspects of environmental consulting.

**2002 - 2013 – URS Corporation (Now AECOM), Chicago, IL**

*Principal Geologist, Senior Project Manager, Group Leader for Brownfields Redevelopment, Client Account Manager*

Expanded customer base and brownfields practice in Chicago office. Fostered client relationships while mentoring in-house staff and developing technical capabilities in GIS/database fields.

**1999 – 2002 – IT Corporation (now CBI), Chicago, IL**

*Client Program Manager*

Developed customer base for the Chicago office. Secured 3 year contracts with four new municipal clients and numerous industrial / commercial clients. Program Manager for a mid-sized chemical company and secured over \$3 million in revenues for engineering services for that client.

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### 1992 – 1999 - Earth Tech Inc. (Now AECOM)

#### *Program Manager, Environmental Department Manager*

Served as the Chicago Environmental Department Manager; managed a group of 25 geologists, engineers and environmental scientists. Responsible for customer account development; project management; staff development; profit and loss.

### 1987 – 1992 – Goldman Environmental Consultants, Braintree, MA

#### *Manager, Environmental Site Assessments*

Managed the Environmental Site Assessments Group, performed Phase I and Phase II ESAs throughout New England and Mid-Atlantic region for major client portfolios

#### **Published Papers:**

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#### **Professional Affiliations:**

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#### **Professional Memberships**

Geological Society of America (GSA)

Association of Environmental & Engineering Geologists, (AEG), past North Central Section Chair

Illinois Board of Licensing for Professional Geologists, Board Member

AEG Foundation - President

#### **Specialized Training**

OSHA 40-Hour HAZWOPER & annual refreshers

OSHA 8- Hour Supervisory Course, Bethesda, MD

#### **Key Projects:**

- Principal/Project Manager for Comprehensive Phase II Environmental Site Assessment of brownfield property now owned by a municipality. Conducted radiologic and geophysical surveys, and soil and groundwater sampling and analysis to evaluate elevated chemical and radiological (Thorium) contamination based on Phase I results. Several sources of radiological contamination were found during investigation activities. Seeking a US EPA Brownfield Assessment Grant to facilitate the Comprehensive Phase II ESA project. USEPA

Cleanup grants will also be sought to assist with remediation.

- Project Manager for Phase I and II ESAs, Geotechnical Investigation and Soil Remediation in support of a redevelopment project a Chicago suburb.
- Principal/Project Manager for a multi-phased project comprising multiple parcels acquired by MPEA for the new McCormick Place Exhibition Hall, Chicago, Illinois. The scope of work included Phase I and II site assessments of each parcel; preparation of remediation plans and specifications; participation in bid package preparation; selection of a remediation contractor; and oversight of the remediation activities. Coordinates with regulatory agencies regarding in obtaining No Further Remediation Letters (NFRs).
- Project Manager for environmental investigation and remediation of brownfield parcels slated for redevelopment as part of the Rush University Medical Center expansion in Chicago. Prepared Phase II Environmental Site Assessments for three separate parcels. Under the Illinois Site Remediation Program (SRP), conducted CSIR/ROR/RAP/RACRs and obtained No Further Remediation Letters (NFRs) for three parcels.
- Project Manager for environmental remediation oversight of a brownfield site to be redeveloped as Chicago Housing Authority residences known as Rockwell Gardens. Obtained NFRs under the Illinois SRP, conducted ROR/RAP/RACRs.
- Project Manager, Client Manager for remediation of a former gas holder located within a Chicago Housing Authority residential housing development. The project included excavation of soils in and around the gas holder; emplacement of a compacted clay cap; and reconstruction of the playground. Coordination with Peoples Gas, the landscape architect; residents; and the community was key to project success. Health and safety controls for the residents and workers were also paramount. The CHA benefited from the improved property and the residents now enjoy a state-of-the-art playground.
- Project Manager for characterization and remediation of a storage lot contaminated by leaking PCB transformers at a Chicago Housing

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Authority residential property. This complex project included: site characterization and remediation of PCB-contaminated soil, sewers, solid surfaces, and groundwater, preparation of sampling plans for site characterization and remedial confirmation sampling, preparation of remediation specifications, contractor implementation plans, community relations, and remediation oversight. Worked closely with CHA, and USEPA to develop PCB action levels for surface and subsurface soils and paved surface areas. The extensive characterization culminated in a site characterization report delineating the extent of contamination and/or cleanup required.

- Client Manager and Project Manager for the environmental remediation/compliance program for multiple sites of a multi-national chemical company. Conducted due diligence reviews, RCRA Corrective Action, RCRA Closure Plans, Phase I and Phase II Environmental Assessments, aboveground and underground storage tank upgrades, and designs and implements major soil and groundwater remediation projects under state regulatory programs.
- Project Manager for Phase I and II investigations and regulatory consulting per Illinois Tiered Approach to Corrective Action Objectives (TACO) and the Illinois Site Remediation Program (SRP). The project resulted in a NFR letter. The NFR paved the way for the 80-year old plant to undergo a \$12 million redevelopment. The redevelopment of the plant is part of an area-wide redevelopment of Brownfields in south Chicago that has revitalized the once dilapidated neighborhood.
- Project Manager for a Brownfield Redevelopment project in suburban Chicago area. Previous uses included the manufacture of grenade detonators during WWI, and plastic ashtrays and mothballs after the war. Drinking water was from on-site wells and an on-site subsurface disposal system was used for disposal of sewage and effluent generated at the facility. Nearby residents had been concerned that past practices at the plant could impact their drinking water supply and a small lake located east of the property. Assisted the municipality and the developer in the redevelopment of the parcel by:

- Attending public meetings to inform citizens of the investigation findings and proposed solutions
- Developing plans and specifications for asbestos abatement and underground storage tank removal and disposal
- Developing sampling strategies to verify remediation
- Conducting further investigation in areas of concern to the citizens of the community
- Providing oversight of asbestos abatement contractors and underground storage tank removal contractors
- Preparing remediation cost estimates

- Project Manager under City of Chicago Brownfields contract for Phase III remediation of a large industrial site. Project tasks included evaluation of the beneficial re-use of foundry sands, assessment and abatement of asbestos contaminated soil, excavation and removal of 15,000 tons of foundry sands and construction and demolition debris.
- Project Manager for investigations of a 550-acre Brownfields site in South Chicago. Portions of the site were previously used for steel manufacturing and chemical manufacturing. Environmental data was subjected to an Illinois TACO evaluation. The evaluation indicated that environmental conditions and contaminants of concern were present, however, proper management of the environmental issues could result in successful redevelopment of this blighted site into a motor speedway.
- Project Manager/Senior Geologist for the remedial investigation and remedial action of a chemical plant with DNAPL and LNAPL plumes. Designed and implemented a remedial design using sulfate amendments and hydro fracturing of the formation to augment biodegradation. The result was an overall decrease in both DNAPL and LNAPL.
- Project Manager/Senior Geologist for the design and operation of a Soil Vapor Extraction LNAPL removal system in a heterogeneous till in the Buffalo, NY. The system operated for more than 5 years and the owner (chemical company) received site closure.
- Project Principal Geologist/Senior Review-for Brownfield Assessment and Remediation for a

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coalition of suburban Chicago communities which were awarded U.S. EPA Brownfields Assessment grants. Assisted with identifying and prioritizing potential brownfields sites in each of the communities, developing strategic regional and site-specific land reuse plans, developing a brownfields prevention program, and leveraged other funding for brownfields redevelopment.

Conducted the following:

- Evaluation of environmental issues related to the prioritization of potential brownfield sites
- Phase I and Phase II Environmental Site Assessments
- Enrollment of sites in the IEPA Site Remediation Program
- Preparation of IEPA Brownfield Redevelopment Grant applications for each of the communities in the coalition
- Development of remedial costs and remedial designs for selected brownfield sites
- Remediation Oversight
- Project Principal Geologist/Senior Review for Brownfield Assessment and Remediation for a Chicago suburb. To continue revitalization of the community, assisted in obtaining two \$200,000 USEPA Brownfields Assessment Grants (one for Hazardous and one for Petroleum sites) for a total of \$400,000. The program will enable the community to enhance ongoing economic development and revitalize the community through evaluation of redevelopment opportunities at targeted properties.

### Presentations

Bryan, Patricia M. and Lasky, Loren, 1st Annual Environmental Geology Symposium on Emerging Contaminants, Association of Environmental & Engineering Geologists Annual Meeting, September 2017.

Bryan, Patricia M., The Role of the AEG Foundation and the Future of Environmental and Engineering Geology, Association of Environmental & Engineering Geologists Annual Meeting, September 2012.

Bryan, Patricia M., A Sustainable Solution to Flooding In a Karst Terrain, Association of Environmental & Engineering Geologists Annual Meeting, September 2011.

Bryan, Patricia M., Creating Sustainable Projects in the Developing World—A Sustainable Solution to Flooding in a

Karst Terrain, Association of Environmental & Engineering Geologists Annual Meeting, September 2010.

Bryan, Patricia M., Implementing Greener Cleanups – Current Status and Case Studies Using Greener Clean Up Options, Association of Environmental & Engineering Geologists Annual Meeting, September 2010

Bryan, Patricia M., Presenting the Big Picture – Evaluating Contaminant Plume Geometry Using LIDAR, GIS, and 3-D Visualization, Association of Environmental & Engineering Geologists Annual Meeting, September 2008.

Bryan, Patricia M., Green Remediation - How Geologists Can Employ Green Remediation at Contaminated Sites, Association of Environmental & Engineering Geologists Annual Meeting, September 2009.

Bryan, Patricia M., Geologic and Hydrogeologic Considerations in Developing an Alternative Energy Source For a Gas-Fired Chemical Plant, September 2007.

Bryan, Patricia M., Soil Vapor Extraction Versus Chemical Oxidation in a Persistent Voc Plume in a Shallow Glacial Till Aquifer., September 2007.

Bryan, Patricia M., A Success Story at Buffalo's Waterfront - Integrated Brownfield Remediation and Redevelopment, Association of Engineering Geologists annual meeting, November, 2006.

Bryan, Patricia M., Remeditating a Groundwater Plume Using Sulfate Amendments, Association of Engineering Geologists Annual Meeting, September 2005.

Bryan, Patricia M., Site Remediation, a Two Phased Approach to Soil and Groundwater Contamination at an Industrial Property, Association of Engineering Geologists Annual Meeting, September 2004.

Bryan, Patricia M., Geological, Geotechnical and Environmental Aspects of Property Reuse In an Urban Setting. Association of Engineering Geologists Annual Meeting, September 2003.