



Qualifications Summary

- Over 25 years' experience in environmental management consulting for industry and government
- Ambient air quality monitoring network design, implementation and management
- Managed multiple PSD, Title V, RACT, and NSR air quality permitting projects in more than 30 states
- Air quality planning and third party permit application review services

Fields of Competence

Mr. Biebuyck is a seasoned environmental consultant with a strong air quality management background. He has extensive experience in the fields of environmental permitting, air quality management, ambient air quality monitoring and analysis, environmental risk strategy evaluations, regulatory affairs consulting, environmental auditing, EMS development, expert testimony and environmental training.

Credentials

B.S., Physics, Stevens Institute of Technology (1985)
Graduate Studies, Physics and Computer Science, University of Texas at Austin (1987)

Employment History

Pennsylvania DER, Bureau of Air Quality (1988-1992)

Air Quality Specialist – Conducted air quality compliance inspections from the Lancaster, PA District Office, prepared air emission inventories, negotiated penalties for pollution violations, determined compliance with air permit conditions, conducted air quality ambient monitoring.

Roy F. Weston, Inc., West Chester, PA (1993-1998)

Project Manager – Prepared air permit applications for a wide variety of industrial sources from automotive manufacturing to pulp mills in over 30 different states. Managed preparation of multiple major source RACT, Title V, PSD, and NSR permit applications.

Department Manager – Managed staff of 15 air quality consultants in four regional offices across the eastern U.S.

UAI Environmental, Inc., Reading, PA (1998-2004)

Vice President – Managed the Strategic Services practice consisting of environmental auditing, regulatory affairs, and environmental management staff. Directed major source air permit projects. Provided environmental risk management consulting services to multinational clients with operations across the U.S.

Liberty Environmental, Inc., Reading, PA (2004 to present)

Principal and Owner – Partner in a 30-person environmental consulting and engineering firm specializing in air quality strategic services and environmental due diligence and brownfields projects. Responsible for financial planning, sustainability and growth of consulting business.

Training and Associations

Air & Waste Management Association (AWMA)
U.S. EPA Air Pollution Training Institute
Pennsylvania Chamber of Business and Industry
Arthur D. Little Environmental Auditing Training

Key Projects

Air Quality Expert Reports and Testimony: Prepared expert reports and provided testimony in Pennsylvania zoning disputes, air quality permit appeals before the Pennsylvania Environmental Hearing Board, and in civil actions involving air pollution matters. Assisted Pennsylvania Townships prepare air pollution ordinances related to crematories and incinerators.

Air Quality Planning Assistance, County of Berks, PA: Provide air quality permit review services and air quality planning services to the County of Berks, Pennsylvania. Air permit application review services are provided for selected air pollution sources and modifications of significance in Berks County. Air quality planning services related to the county's nonattainment status are provided to assist the county with responsible economic development. Lead nonattainment planning provided to assess areas of the county that may be classified nonattainment with the 2008 lead NAAQS. Air dispersion modeling using AERMOD to assess ambient lead concentrations in the vicinity of secondary lead smelters and battery plants.

Ambient Air Quality Monitoring, PICEH: Design, operate and maintain an ambient air quality monitoring network in Berks County, PA for a non-profit, Pennsylvania Institute for Children's Environmental Health (PICEH) in partnership with the PA DEP. Monitoring includes meteorological parameters, PM_{2.5} real-time sampling using BAM monitors, and air toxic sampling for metals and organics. Provide and archive ambient monitoring data from 17 monitoring sites in PA via websites.

Clorox Company, Multiple Facilities; Project Director: Provide air quality permitting assistance and environmental consulting to consumer products manufacturing facilities located in eighteen states. Assist corporate and plant personnel in developing air permitting and compliance strategies and resultant plant 'ownership' of air quality management programs. On-call assistance to corporate regulatory affairs personnel in commenting on proposed state and federal rulemaking. Environmental training regarding EPCRA reporting and New Source Review requirements is provided to plant management and engineering personnel. Environmental auditing assistance has been provided at multiple facilities.

PSD Permitting Applications for Major Plant Expansion Projects in West Virginia, Kentucky, Alabama, Mississippi, and Missouri. PSD permitting assistance included permit strategy, environmental inventory, air dispersion modeling, visibility impacts assessment using CALPUFF, and BACT analyses. Negotiations with state agency personnel and preparation of draft permit terms and conditions.

Greenhouse Gas Management Services, Multiple Clients, Various Locations: Develop greenhouse gas (GHG) management strategies and prepare greenhouse gas emission inventories for industrial clients in accordance with U.S. DOE and World Resources Institute guidelines. Developed baseline GHG inventory in 2007 for a Fortune 500 consumer products company's U.S. and international

manufacturing, office, and distribution operations. Assisted client in development of GHG reduction strategies to set voluntary reduction targets.

Title V Permitting for Multiple Clients, Various Locations: Developed Title V permitting strategy, physical, and emission inventories, performed regulatory reviews, and provided assistance in development of operating scenarios and compliance demonstration for numerous clients in the pulp and paper, chemical, secondary metals, automobile, bakery, and furniture industries in 20 different states.

East Penn Manufacturing Co., Inc., Pennsylvania; Project Manager: Provided comprehensive air quality management consulting services since 1994 to the largest manufacturing employer in Berks County, Pennsylvania. East Penn operates a secondary lead smelter, lead-acid battery manufacturing plants, and a wire and cable manufacturing plant that collectively employ more than 3,500 people. Air quality permitting and meteorological monitoring assistance has routinely been provided. RACT Plan, Title V, and MACT assistance has been provided.

Reasonably Available Control Technology (RACT) emission inventories and control technology evaluations for multiple clients in Pennsylvania, Connecticut, and New York. RACT plans proposing catalytic oxidizers at bakery ovens were prepared for clients in Pennsylvania and Connecticut. A RACT plan addressing VOC emissions was prepared for a kitchen cabinet coating operation in Pennsylvania. RACT plans assessing NO_x reduction options were prepared for a lead smelter in Pennsylvania and a pulp mill in New York.

Environmental Audits for Multiple Clients: Managed environmental audits as part of privileged reviews, ISO 14001 and due diligence projects. Participated in several self-disclosure audit projects resulting in significant penalty reduction for clients with compliance issues.

PA Department of Environmental Resources; Air Quality Specialist: Developed comprehensive inventories of air emission based on air emission test results, material balance calculations, and AP-42/NEDS emission factors. Work included computer tracking of emissions on Pennsylvania Emission Data System (PEDS) and use of EPA NEDS emission database. Conducted ambient air quality monitoring and serviced PM samplers. Field inspections, compliance determinations, regulatory enforcement, development and review of emission inventories and control technology assessments at a variety of sources including surface coating operations, mineral processing facilities, lime and brick kilns, cement manufacturing plant, foundries, and vinyl floor manufacturing plant.

Publications

Biebuyck, G.L. and Dismukes, S.R. "Air Quality Monitoring & Clean Air Act Enforcement Initiatives" Presented at Environmental Law Forum in Harrisburg, PA in April 2016

Biebuyck, G. L. and Wickstrom, J.G. "Inhalation Risk Assessment for Ambient Air Toxic Concentrations Monitored in Berks County" Presented at the Air & Waste Management Association Annual Meeting in Chicago, IL in June 2013

Biebuyck, G. L. and Wickstrom, T.S. "Comparison of State Recommendations and Methodologies for Defining Partial-County Lead Nonattainment Areas Under the 2008 Lead NAAQS and Comparative Air Dispersion Lead Modeling for Pennsylvania Lead Sources" Presented at the Air & Waste Management Association Annual Meeting in Calgary, Alberta, Canada in June 2010

GAVIN L. BIEBUYCK
Principal Consultant

PROFESSIONAL PROFILE

Biebuyck, G. L. and Zeiders, M. D. "Assessing Source Contributions to Ambient Metal Air Toxic Concentrations in Reading, Pennsylvania" Presented at the Air & Waste Management Association Annual Meeting in Calgary, Alberta, Canada in June 2010

Biebuyck, G.L. and Dismukes, S.R. "Air Toxic MACT Standards – Impacts of Court Decisions" Presented at PA Chamber of Business and Industry 2010 Mid-Atlantic Annual Environmental & Energy Conference in April 2010

Biebuyck, G. L. and Zeiders, M. D. "Source Apportionment of Fine Particles in Southeastern Pennsylvania and Comparison of Source Contribution Differences Across Region" Presented at the Air & Waste Management Association Annual Meeting in Portland, OR in June 2008

Biebuyck, G.L. "PM2.5 Regulatory Development and Implementation Issues" Panel participant at the Air & Waste Management Association Annual Meeting in Pittsburgh, PA in June 2007

Biebuyck, G. L. and Zeiders, M. D. "Comparison of Fine Particulate Matter Speciation Data at Eight Southeastern Pennsylvania Ambient Air Monitoring Sites" Presented at the Air & Waste Management Association Annual Meeting in Pittsburgh, PA in June 2007

Biebuyck, G. L. "Berks County Air Quality Update" Presented to the Berks County Chamber of Commerce and to the Manufacturers Association of Berks County in December 2005

Biebuyck, G. L. "MACT Standard Development Update" Presented to the PA Chamber of Commerce Environmental Law Conference in April 2004

Biebuyck, G. L. and Dismukes, S.R. "Title V Draft Permits." Presented at the Allegheny County Health Department "Title V Draft Permits Workshop" on June 28, 2001

Biebuyck, G. L. "New Source Review Overview." Presented at the UAI Environmental, Inc. "New Source Review Workshop" on November 9, 2000

Biebuyck, G. L. "Air Permitting for Small Businesses in Pennsylvania." Presented at the Berks County Chamber of Commerce, 1999

Steiner, C.P. and G. L. Biebuyck "Add-on Technologies for Control of VOC." Presented at the American Institute of Chemical Engineers 1993 Annual Meeting, Houston, Texas, March 1993

Biebuyck, G. L. "Self-Propagation of a Barotropic Circular Vortex." Proceedings of the Summer Program in Geophysical Fluid Dynamics at Woods Hole Oceanographic Institution, 1986