

# Catherine Bobenhausen, MS, CIH, CSP, AIHA Fellow, LEED AP BD+C Senior Consultant

# **Summary of Qualifications**

- 25+ years delivering exposure assessment and IH support, including material health evaluations, toxicological reviews, IH surveys, IH risk assessments, compliance audits, indoor environmental quality investigations, and EHS programs and training.
- Managed projects for a broad range of clients including: architects/property owners & developers, manufacturers, researchers, medical facilities, scrap metal/electronics recyclers, wastewater treatment operators, and university art departments.
- Consultant on sustainable design projects including LEED, Living Building Challenge, and WELL, integrating sustainability, chemical restrictions, certifications and test protocols, and indoor air quality testing, for informed selection and delivery of lower impact building products.

#### **Education**

- New Jersey Institute of Technology Institute of Hazardous & Toxic Waste Management/University of Medicine and Dentistry of New Jersey Graduate School of Biomedical Sciences/Rutgers Medical School Master of Science, Toxicology Option
- State University of New York College at Purchase Bachelor of Art, Environmental Science

## **Professional Associations/ Certifications**

- Certified Industrial Hygienist (CIH), Comprehensive Practice American Board of Industrial Hygiene, License 3388
- Certified Safety Professional (CSP), Comprehensive Practice, Board of Certified Safety Professionals, License 12711
- Authorized GreenScreen Practitioner®, Clean Production Action
- LEED Accredited Professional in Building Design + Construction, United States Green Building Council

#### **Organizations**

- ASTM International Sustainability Committee E60
- Health Product Declaration Collaborative Technical Committee and Co-Chair Harmonization Technical Subgroup
- American Industrial Hygiene Association Indoor Environmental Quality Committee (Best Paper Award Team) and Green Building Working Group
- Advisory Committee, Chemical Hazard Data Commons
- Workshop Leader and Mystery Woman in American Association of University Women Exploring Your Opportunities (EYO) STEM Opportunities for Girls conferences
- Westchester Emergency Volunteer Reserves



# **Professional Highlights**

#### **COLDEN CORPORATION**

A Senior Consultant with Colden, Ms. Bobenhausen is engaged in a variety of environmental health and safety and sustainable design/material health consulting services. She provides exposure assessment and IH support, including material health evaluations, toxicological reviews, IH surveys, IH risk assessments, compliance audits, indoor environmental quality investigations, and EHS programs and training. She evaluates manufacturing processes, work practices and equipment for client companies to ensure compliance with OSHA requirements, reduce injury rates, control exposures, and instill safe work practices.

She offers guidance and technical assistance in satisfying product transparency/optimization standards and emissions test protocols, achieving compliant Health Product Declarations, DECLARE labels, and Safety Data Sheets. She works with architects, sustainability consultants and manufacturers on sustainability issues related to ingredient transparency and reporting, and optimized product choices, establishing chemical restrictions, certifications and test protocols in project specifications.

# VIDARIS, INC.

Ms. Bobenhausen served as a Material Health Sustainability Consultant and Senior Certified Industrial Hygienist for Vidaris, a firm headquartered in New York City, for a diversity of clients:

**For Architects and Real Estate Owners**, she evaluated the validity of certifications and reports of volatile organic compounds (VOC) emissions for architectural products, and interpreted supporting documentation on chemistry, including equivalency evaluations for European classification systems.

**For Manufacturers,** she provided OSHA exposure monitoring, compliance audits, EHS training, and resolution of questions related to product stewardship and OSH management systems.

**For Design Teams**, she contributed health and safety technical consulting related to process flow, safety shower/eyewash stations and local ventilation, capture and control for labs, art departments and specialty spaces.

**For Construction Teams and New Building Owners**, she executed indoor air quality test campaigns meeting LEEDv2009, LEEDv4, and Living Building Challenge credit requirements.

#### STATE UNIVERSITY OF NEW YORK (SUNY)

As a graduate school adjunct faculty member in the Sustainable Interior Environments program, Ms Bobenhausen promoted active learning on topics of indoor air research/diagnostics, ventilation and thermal comfort, and environmental health and safety design issues, and served as thesis mentor



#### FIRST ENVIRONMENT, INC.

An Associate with First Environment, Ms. Bobenhausen co-developed technical sections of the Recycling Industry Operation Standards® (RIOS) quality, environmental, and health and safety (QEHS) management system and audited scrap metal facilities nationally using RIOS. Technical consultant for Westchester County's Climate Action Plan.

#### **EMILCOTT ASSOCIATES, INC.**

Ms. Bobenhausen served as an Indoor Air Quality Consultant providing industrial hygiene consulting services including noise monitoring, training in emergency procedures, and spill prevention. Managed hazard communication, personal protective equipment/respirators, HAZWOPER and OSHA program development to various clients. For the U.S. Department of Housing and Urban Development's Office of Native American Programs, she supplied outreach training nationally to tribes and tribally-designated housing entities and maintenance staff, for workable and affordable ways to improve housing, control moisture, and prevent mold and other asthma triggers.

## **JACQUES WHITFORD (STANTEC)**

One of two certified industrial hygienists at this Canadian environmental engineering firm of 1,100 employees in over 35 offices, Ms. Bobenhausen reviewed internal reports on workplace safety, provided oversight of projects in Canada, conducted OSHA compliance, and indoor air quality investigations, in addition to project management in New York offices.

#### STEVEN WINTER ASSOCIATES, INC.

Ms. Bobenhausen served as the Director of Environmental Hazards Research, including research with former leader of the indoor air/ventilation group of the National Institute of Standards and Technology (NIST), conducting tracer gas/formaldehyde/VOC/ozone testing. She assisted in drafting the NYS Green Building Tax Credit regulations for indoor environmental quality, operations and maintenance, and materials, finishes and furniture. She contributed to NYC's High Performance Building Guidelines and produced and delivered half-day sessions on indoor air quality, chemical safety and integrated pest management to 500 property managers of midand high-rise residential buildings throughout NYS.

#### MALCOLM PIRNIE, INC. (ARCADIS)

Ms. Bobenhausen served as the USEPA Region 2 ARCS Superfund Program Management Office's Health and Safety Manager, responsible for approving hazardous waste site investigation health and safety plans, and auditing field activities for sites including military bases and U.S. Army Corps of Engineers. She interpreted chemical data for sites contaminated with BTEX, VOCs, PAHs, cyanides, MGP residue, PCBs, dioxins, asbestos, radon, silica, and heavy metals. She peer-reviewed RI/FS reports on vapor intrusion, and conducted multiple pathway human health risk assessments. She also completed industrial hygiene investigations/OSHA compliance audits in hospitals, pharmaceutical research firms, wastewater treatment plants, automotive industry and foundry operations. She gave expert witness testimony in a labor and management arbitration hearing for industrial wastewater treatment facility.



#### **Selected Presentations / Published Abstracts**

Wagner, D, Cheng, Z, Kaminsky, A, Mainster, S, Brock, G, Spalter, R, and **Bobenhausen, C**, Safeguarding Our Resources and Indoor Air – Gypsum Wallboard Closed Loop Recycling in an Era of Increased Chemical Transparency. Healthy Building America, July 2015.

Bobenhausen, C, Nguyen Weekes, LC, Stuber, E, Indoor Air Quality Management and Sampling – LEED 2009 and LEED v4. Greenbuild, October 2014.

#### **Selected Publications**

Bobenhausen, C, Transparency in Building Materials: How Architects, Certified Industrial Hygienists and Manufacturers Inform Client Choice. The Synergist, December 2017.

Bobenhausen, C, Todd, J A, Vittori, W, Introducing Health Product Declarations: New Tool Facilitates Informed Choices in Building Design. The Synergist, November 2016.

Bobenhausen, C, Harmonization in Green Building: Tools for Assessing Chemical Hazards in Building Products. The Synergist, April 2016.

Bobenhausen, C, Formaldehyde in Flooring – Testing and Sampling Guidance for Industrial Hygiene Practitioners. The Synergist, November 2015.

Bobenhausen, C, Getting It Right the First Time. New England Real Estate Journal, April 2013.

Gunderson, E, and **Bobenhausen, C.** "Indoor Air Quality" in The Occupational Environment: Its Evaluation, Control and Management. Anna, D, ed. Third edition. Fairfax, VA: American Industrial Hygiene Association, 2011.

Bobenhausen, C, Sustainable Operations & Maintenance Practices. Whole Building Design Guide, July 2010.

Bobenhausen, C, "Special HVAC Equipment" in Time-Saver Standards for Architectural Design – Technical Data for Professional Practice. Watson, D, Crosbie, M, eds. New York, NY: McGraw-Hill, 2004.