T.A. (ANDY) ROWLAND III, CIH PRINCIPAL

PROFESSIONAL EXPERIENCE

Mr. Rowland is known throughout North America for his exhaustive body of work in the fields of Industrial Hygiene, Environmental Health, Safety, and Education. He earned a Bachelor of Science degree in Mechanical Engineering Technology at Clemson University, and he has over 37 years of laboratory, field, and classroom experience. Mr. Rowland has lectured for such esteemed institutions as the University of North Carolina at Chapel Hill, Clemson University, North Carolina State University, the Georgia Institute of Technology, the University of South Carolina, North Carolina A&T University, and the Medical University of South Carolina (MUSC). Mr. Rowland served as Director of MUSC's Program in Environmental Health Sciences for over twelve years, where his research and work were funded by the U.S. Environmental Protection Agency, the U.S. Department of Energy, the Department of Education, and industrial entities such as Duke Energy and BP Amoco. Recent projects lead by Mr. Rowland include Environmental Health and Safety Audits at the Electric Power Research Institute's laboratory facilities in Charlotte (NC), Knoxville (TN), Lowell (MA), and Palo Alto (CA), as well as, serving as chief industrial hygienist for the U.S. Chemical Safety Board's investigation of a fire and explosion within a natural gas plant in Mississippi. At Imprimis, Mr. Rowland now divides his time between providing Environmental Health & Safety (EHS) consulting support to a wide variety of clients, lecturing on EHS topics for industry, and providing expert witness services.

Asbestos – Mr. Rowland is known nationally as a preeminent Asbestos Subject Matter Expert. He began his work within the field of asbestos when the United States Navy released its "Controlled Procedure for the Removal of Asbestos Containing Materials" document, known then as the "02080 Asbestos Spec", at Pier Lima at the Charleston Naval Shipyard in 1978. Since that day, Mr. Rowland has inspected hundreds of buildings for ACM, worked on hundreds of asbestos abatement projects, developed hundreds of Asbestos O&M and Management Plans, developed hundreds of Asbestos Project Designs, authored countless asbestos textbooks, and taught asbestos courses to tens of thousands of students across North America. He is not only a master of asbestos regulations, but he is used by many regulatory agencies as a resource regarding the interpretation of those same regulations. In addition, Mr. Rowland has been used as a valued resource as the 02080 specification has evolved over the years into the modern 13281 in use today. Mr. Rowland's work within the field of asbestos has taken him from the Carolinas to California and from Texas to British Columbia. Today he divides his asbestos work into three general areas: 1) Teaching EPA and OSHA asbestos courses, 2) Taking on unique and challenging asbestos projects as designer and manager, and 3) Providing expert witness services and testimony.

Lead (Pb) – Mr. Rowland began his work in the field of lead-based paint (LBP) management in 1989, overseeing the removal of LBP from a series of buildings and communication towers located at the Marine Corps Air Station in Beaufort, South Carolina. He has also tackled LBP projects within historically significant federal buildings such as the Customs House in Charleston, South Carolina. After completing dozens of LBP projects throughout the region, Mr. Rowland began to teach all the EPA Lead courses at the Medical University of South Carolina in 1995. When EPA released its regulation pertaining to LBP activities

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Contact

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Education

Bachelor of Science, Mechanical Engineering Technology, Clemson University, 1985

Registrations

SC Licensed Asbestos Building Inspector

SC Licensed Asbestos Management Planner

SC Licensed Asbestos Project Designer

North Carolina Supervising Air Monitor

Certifications

Certified Industrial Hygienist: American Board of Industrial Hygiene, CP 10671, Since 2014

Infection Control Certified Healthcare Manager, Since 2013

Certified Residential Mold Inspector: Indoor Environmental Standards Organization

Work History

Terracon Consultants, Inc. Nat. Manager of Industrial Hygiene Olathe, KS 2016 - 2023

Applied Building Sciences, Inc., N. Charleston, SC Senior Industrial Hygienist and Director of Environmental Health Training, 2006 – 2016.

Medical University of South Carolina, Member of Faculty and Program Director for Environmental Health Sciences, 1994 – 2006

Medical University of South Carolina, Faculty Instructor (Department of Environmental Health Sciences) 1994

EnviroSpec, Inc., Environmental Engineering Consultant 1989-1994 in Target Housing and Child Occupied facilities, Mr. Rowland was retained (pro bono) to edit the 13283 spec so that it correctly encompassed the requirements brought about by the new regulation. Mr. Rowland is the only individual within EPA Region IV fully qualified to teach the EPA Lead Project Designer course. Mr. Rowland possesses exhaustive experience within each of the lead disciplines and is uniquely qualified to tackle a broad spectrum of lead (Pb) projects.

IAQ/Mold – Mr. Rowland began his work within the field of Indoor Environmental Quality while serving as Director of MUSC's Program in Environmental Health Sciences. He developed the curricula and textbooks for all of the university's IEQ courses and served as primary instructor. He has been involved in countless Mold/IEQ projects and now frequently provides expert witness services and testimony. Mr. Rowland has been involved in the development of the Navy Mold spec since its inception and participated in a series of meeting with NavFac SoDiv personnel including the "Mold Summit" in February of 2006. Mr. Rowland possesses a unique understanding of IEQ issues stemming from his mastery of construction, mechanical engineering, building physics, thermodynamics, aerobiology, and practical remediation methods.

PROJECT EXPERIENCE

EPP Plant Recovery – Pascagoula, Mississippi

Project involves emergency response to fire and explosions within a gas processing plant near the Gulf of Mexico. Mr. Rowland was retained by the U.S. Chemical Safety Board to provide industrial hygiene and safety services during the post-event root cause analysis. Project includes such issues as life safety, Benzene, Mercury, Hydrogen Sulfide, Lead (Pb), and Asbestos.

Palmetto Health Hospitals: Asbestos Surveys - Columbia and Easley, South Carolina

Project involved inspecting eight hospital facilities (approximately 1.8 million square feet of conditioned floor space) over a wide geographic area for asbestos-containing materials, reporting all findings, and providing the client's accounting department with accurate abatement costs. Project involved evaluation of existing archival documents spanning nine decades, pre-existing asbestos reports, abatement documents, and a great deal of CAD work.

Duke Energy North America – Carolinas, Texas, Colorado, California, & British Columbia

Mr. Rowland conducted compliance and conformance audits for Duke Energy at their power generation (gas, fossil, nuclear) and distribution facilities throughout North Carolina, South Carolina, Texas, Colorado, California, and British Columbia. Mr. Rowland provided asbestos consulting services and training at their facilities in Ohio, Illinois, and Indiana.

Presbyterian College: Georgia Hall – Clinton, South Carolina

Large multi-story dormitory building was flooded by two separate plumbing events. Mr. Rowland was retained by The Travelers Companies and the Gallivan, White & Boyd P.A. law firm to determine the scope of damages genuinely precipitated by the water events, the corresponding appropriate scope of asbestos abatement work, and the fair market value of such asbestos abatement work.

Market Common Dentistry – Myrtle Beach, South Carolina

Mr. Rowland was retained by the Market Common Dentistry Clinic to perform an Indoor Environmental Quality assessment, to develop the protocol/scope for proper remediation, to verify successful completion of the remediation work, and to testify as expert witness at the trial that was ultimately won by the client.

Northside Elementary School: Mold Assessment/Recovery – Walterboro, South Carolina

Mr. Rowland was retained by Colleton County School District to assess the mold contamination, develop the protocol/scope for proper remediation, oversee the remediation, participate in press conferences, speak at "town hall" meeting with concerned parents, and conduct the final clearance following remediation. The project involved the relocation of approximately 600 students and decontamination of all contents and finishes throughout the facility.

PROFESSIONAL ORGANIZATIONS

- American Board of Industrial Hygiene, since 2014
- American Conference of Governmental Industrial Hygienists, since 2015
- American Society of Mechanical Engineers
- National Registry of Environmental Professionals, registered since 1994
- National Institute for Certification in Engineering Technologies, certified since 1985
- Environmental Information Association, One of four founding members of South Carolina Chapter, Served as Vice President, President Elect, and President. Former Member of Board of Directors.
- Indoor Air Quality Association, member since 2002
- Indoor Environmental Standards Organization, member of Advisory Board and IESO Standards Sub-Committee

TEXTBOOKS AUTHORED

- Microbial Remediation: Design and Abatement, Medical University of South Carolina Press, 2004
- EPA Lead Project Designer Text, Medical University of South Carolina Press, 2004
- IAQ: Mold Remediation Project Designer Text, Medical University of South Carolina Press, 2005
- AHERA Asbestos Inspector Refresher Text, ABS Press, Charleston, South Carolina, 2006
- AHERA Asbestos Management Planner Refresher Text, ABS Press, Charleston, South Carolina, 2006
- AHERA Asbestos Supervisor Refresher Text, ABS Press, Charleston, South Carolina, 2006
- AHERA Asbestos Worker Refresher Text, ABS Press, Charleston, South Carolina, 2006
- An Introduction to IAQ for Facility Managers, ABS Press, Charleston, South Carolina, 2006

RECENT PUBLICATIONS

- OSHA's Crystalline Silica Standards; New Solution to a Very Old Problem, Occupational Health & Safety Magazine, June 2019
- IH 101: An Introduction to Industrial Hygiene, LinkedIn, March 2022
- <u>Terracon's Hurricane Ida Response</u>, <u>www.terracon.com</u>, May 2022

RECENT CONFERENCE PRESENTATIONS

- <u>Industrial Hygiene in the Wake of a Catastrophe</u>, American Industrial Hygiene Conference and Exhibition, Philadelphia, Pennsylvania, May 22, 2018
- <u>The Aftermath of Severe Flooding</u>, Environmental Bankers Association National Conference, New Orleans, Louisiana, January 22, 2019
- <u>Disaster Planning: Pro-Action + Re-Action = Resiliency</u>, Midwest Environmental Compliance Conference, Kansas City, Missouri, September 13, 2022