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MICHAEL S. ANDREW

Executive Officer, Technical Services

MS, CIH, CSP, LEED AP

PROFESSIONAL EXPERIENCE

Michael Andrew is a dedicated and highly experienced occupational & environmental health and safety (OEHS) professional. He has provided consulting services on a variety of OEHS issues to private & public companies, government agencies, non-governmental agencies (NGO), attorneys, schools, and individuals. This work includes conducting hundreds of evaluations worldwide to evaluate physical, biological and chemical hazards in both occupational and community environments. He has provided services and consulting in a diverse set of environments including ambient environments (outdoors), manufacturing environments, healthcare facilities, office and institutional buildings, residential settings, construction sites, and schools and universities in over 15 different countries.

His specialties include environmental sustainability programs, creation of health and safety plans and programs, conducting environmental health and safety assessments, designing and implementing exposure assessments, statistical interpretation of analytical data, HVAC and local exhaust system evaluations, assessment of indoor environmental quality issues, forensic assessments of contamination/damage, community and occupational noise, OEHS training, and assessments for regulatory compliance. He has extensive experience in assessments of apparel, equipment, and footwear manufacturing facilities. Based on his experience in these areas, Mr. Andrew is called upon to provide analysis and testimony as an expert witness in occupational & environmental health and safety legal cases.

Michael Andrew regularly provides training on OEHS topics such as fire safety, occupational hygiene, indoor air quality, building safety, risk assessment and prioritization, root cause analysis, proper chemical management and handling, personal protection equipment, conducting exposure assessments, and forensic assessments of contamination/damage to mention a few. A regular guest speaker at OEHS conferences and committee member, Mr. Andrew is an active member of the occupational hygiene community.

In addition to his work in OEHS, he has experience in conducting social, security, and sustainability assessments. Michael Andrew regularly works with global brands to develop Corporate Social Responsibility (CSR) and OEHS related assessment programs.



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CERTIFICATIONS AND REGISTRATIONS

Certified Industrial Hygienist (CIH), Comprehensive Practice. Issued by the American Board of Industrial Hygiene.
Certificate # CP 9158

Certified Safety Professional (CSP). Issued by the Board of Certified Safety Professionals.
Certificate # 20019

Leadership in Energy and Environmental Design Accredited Professional (LEED AP) Issued by the US Green Building Council.

EDUCATION

Master of Science, Environmental Engineering, Georgia Institute of Technology, 2000.

Bachelor of Science, Marine Science / Applied Mathematics, Coastal Carolina University, 1997.

APPOINTMENTS

Global Social Compliance Programme (GSCP) – Register of Experts (Environmental)

SPECIFIC MANUFACTURING INDUSTRIES & PROCESSES (selected)

- Sports Equipment
- Footwear
- Apparel
- Screen Print
- Cutting / Sewing
- Packing, Packaging, & Shipping
- Plating
- Weaving
- Dyeing / Washing
- Wastewater Treatment
- Etching / Engraving
- Machining
- Welding
- Spray Treatment
- Sand Blasting
- Grinding / Buffing

PEER REVIEWED PUBLICATIONS

Smith, P.A., M. Roe, M.S. Andrew, B. Kollmeyer. Chapter 17 - Direct-Reading Instruments for Gases, Vapors, and Particulates. *Fundamentals of Industrial Hygiene – 6th Edition*. National Safety Council, 2012

Andrew, M.S., P. R. Morey, and B.K. Ligman. Comparison of Culturable Fungi in Water Damaged Buildings, BASE Buildings, and the Outdoor Air. In *Bioaerosols, Fungi, Bacteria, Mycotoxins and Human Health*. Edited by Johanning, E., Albany, New York, 2005.

Morey, P.R., M.C. Hull, M.S. Andrew. El Niño water leaks identify rooms with concealed mould growth and degraded indoor air quality. *International Biodeterioration & Biodegradation* 52, 197-202, 2003.

Butler, A. J., M.S. Andrew, and A.G. Russell. Daily sampling of PM2.5 in Atlanta: Results of the first year of the Assessment of Spatial Aerosol Composition in Atlanta study. *J. Geophys. Res.*, 108(D7), 2003.

Morey, P., M. Andrew, B. Ligman, J. Jarvis. Hidden Mold Sometimes Enters the Indoor Air. *Proceedings of Indoor Air 2002*, pp. 455-460, Monterey, CA, 2002.



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PUBLISHED ARTICLES/WHITEPAPERS

M.S. Andrew, J. Dakin. 'Chemical Roulette: Chemical safety management issues in contract manufacturing'. Occupational Safety Asia (OSA) Magazine. November 2013.

PRESENTATIONS (Selected)

- Andrew, M.S. 'Misapplication of non-respirator facemasks for worker protection in Asia Pacific Region'. AIHce 2014, San Antonio, TX, June 2014
- Andrew, M.S. 'Occupational Hygiene Investigation of Mass Illnesses (Fainting) at Two Cambodian Garment Factories'. 9th IOHA International Scientific Conference, Kuala Lumpur, Malaysia, September 2012.
- Andrew, M.S., M. Rosales. 'Field Evaluation of Passive Ozone Detector Badges for use as Screening Tools during Ozone Treatment Process'. *AIHce 2012*, Indianapolis, IN, June 2012.
- Andrew, M.S., T. Chen. 'Application of Traditional and Bayesian Statistics in Chemical Exposure Assessments of Factories Located Outside of the United States'. *AIHce 2011*, Portland, OR, May 2011.
- Andrew, M.S. 'Case Studies Using Particle Identification for Forensic Indoor Environmental Quality Investigations'. *AIHce 2011*, Portland, OR, May 2011.
- Andrew, M.S. 'Occupational/Industrial Hygiene Program Implementation in Local Factories'. *2010 Multi-Brand Compliance Summit*, Dongguan, China, December 2010.
- Rosales, M., M.S. Andrew, D. Cox. 'Evaluating Community Noise Levels: A Case Study of Residential Impact.' *AIHce 2010*, Denver, CO, June 2010
- Andrew, M.S., M. Rosales, M. Waz. 'Evaluation of Damage and Environmental Health Risk of Fire Contamination in Buildings: Two Case Studies', *Indoor Air Quality Association (IAQA)/ Air Conditioning Contract of America Conference and Expo*, Tampa, FL, March 2010
- Andrew, M.S. 'Occupational/Industrial Hygiene Issues Confronting Local Factories: Exposure Assessment and PPE'. *Environmental Health & Safety Multi-Brand Factory Summit*, Bangalore, India, March 2010.
- Andrew, M.S. 'Leadership in Energy and Environmental Design (LEED) Requirements: Credits and Accreditation'. *California Industrial Hygiene Council (CIHC) Conference 2009*, San Francisco, CA, December 2009.
- Andrew, M.S., B. Kollmeyer. 'Damage and Environmental Health Risk Assessment of Settled Smoke Particles from Wildfires'. *AIHce 2009*, Toronto, Canada, June 2009
- Andrew, M.S. 'Evaluating Wildfire Smoke Damage and Contamination', *Inland Empire Claims Association*, Ontario, CA, February 2009
- Martinelli, J., M.S. Andrew, K. Trapp. 'Environmental Monitoring and Evaluating Cleanliness During Duct Cleaning in an Occupied Hospital', *Indoor Air Quality Association (IAQA)/National Air Filtration Association (NAFA) Annual Meeting*, Fort Worth, TX, February 2009
- Andrew, M.S. 'MRSA: Health & Safety, Testing and Reporting', *Indoor Air Quality Association-LA Chapter Workshop*, Woodland Hills, CA, October 2008
- Andrew, M.S. 'Considerations in Choosing IEQ Chemical Sampling Methods: Discussion and Case Studies'. *AIHce 2008*, Minneapolis, MN, June 2008.
- Andrew, M.S. 'Occupational Health in International Factories: Examination of Standards, Enforcement, Conditions and Available Resources'. *AIHce 2008*, Minneapolis, MN, June 2008.



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- Andrew, M.S. 'Industrial Hygiene Abroad: Case Studies of Chemical Exposure in International Factories'. *Northwest Occupational Health Conference*. Seaside, OR, October 2007
- Andrew, M.S., D. Cox, C. Godard. 'The Role of the Industrial Hygienist in Green Building: Principles, Problems and Performance'. *AIHce 2007*, Philadelphia, PA, May 2007.
- Andrew, M.S., B.L. Epstien. 'Sampling for VOCs in Settled Dust Can Settle IAQ Complaints'. *Indoor Air Quality Association (IAQA)/National Air Filtration Association (NAFA) Annual Meeting* Las Vegas, NV, September 2004
- Epstien, B., M. Andrew, M. Knipfer, M. Black. 'IEQ clearance testing of newly constructed buildings'. *AIHCE 2004*, Atlanta, GA, May 2004
- Andrew, M.S. 'IAQ Challenges Faced by Educational Institutes & Best Practices for Prevention on a Budget'. *Pacific Coast Association of Physical Plant Administrators (PCAPPA) Educational Conference* San Diego, CA, September 2004.
- Andrew, M., B.L. Epstien, D. Ingram, C. Lange, B. Ligman. 'Indoor Environmental Allergens and their Contribution to Childhood Asthma'. *Air and Waste Management Association and USEPA's Indoor Air Quality Problems and Engineering Solutions* Research Triangle Park, NC, July 2003.

PROFESSIONAL AFFILIATIONS

- Member, Air & Waste Management Association (AWMA)
- Member, American Conference of Governmental Industrial Hygienists (ACGIH)
- Member, American Industrial Hygiene Association (AIHA)
- AIHA Green Building Working Group
- AIHA International Affairs Committee
- Past Board Member, Orange County Local Chapter
- Member, American Society of Safety Engineers (ASSE)
- Member, International Commission on Occupational Health (ICOH)



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