

NANCY M. MCCLELLAN, M.P.H., CIH, CHMM

Utica, Michigan

+1-224-517-2990

www.OH-Management.org

nancy.mcclellan@oh-management.org

www.linkedin.com/in/nancy-m-mcclellan

INDUSTRIAL HYGIENE & SAFETY CONSULTANT, & EXPERT WITNESS

Award winning, industrial hygiene and safety expert with over 25 years of broad international experience practicing, teaching and authoring to anticipate, recognize, evaluate, control and prevent workplace health and safety hazards in high hazard industries.

Extensive expertise in pandemic, Covid-19 response management including chemical and non-chemical disinfectant exposure evaluation and controls.

Domestically and internationally recognized for leadership service to the IH profession as a Chair and/or Director for the American Industrial Hygiene Association, the American Board of Industrial Hygiene, the Occupational Hygiene Training Association and the Joint Industrial Hygiene Ethics Education Boards of Directors and Committees.

Currently Chair of the External Advisory Board at the University of Michigan Graduate School of Public Health, while continuing to practice industrial hygiene program management as an experienced (17+ years) independent consultant, subject matter expert, and international expert lecturer.

- Covid-19 Response Management
- Biohazard assessment and pandemic control programs
- Air and Surface Disinfection evaluation and controls
- Trained and experienced expert witnessing
- H&S policy and program development and audits
- Potent compound and high hazard exposure assessment and containment implementation
- USP 800 Safe Hazardous Drug Handling conformance
- Hearing conservation program development and controls
- Explosive (UXO) hazardous waste and military testing operations program development
- Respiratory protection and fit testing programs
- All levels of occupational hygiene and safety training

SIGNIFICANT ACCOMPLISHMENTS

Technical

- Planned and carried out evaluation and exposure assessment of global drug supply management resulting in >55% reduction in respiratory personal protective equipment in clinical packaging operations. Completed initiative resulted in potential total reduction of >70% respiratory protection equipment as new engineering controls were implemented and evaluated for controlling pharmaceutical dust.
- Developed and executed strategy for assessing potential IDLH chemical release during missile destruction testing. Outcome enabled missile scientists to safely enter the test site and collect time-critical data.
- Provided expert witnessing to nationally profiled, occupational health cases in multiple states.
- Executed reduction of >70% respiratory personal protective equipment for potent compound isolators as result of statistical analysis of occupational hygiene data, saving time and materials and eliminating need to transport active pharmaceutical ingredients between facilities.
- Identified and addressed the mysterious source of staphylococcus biohazard in canning industry to address epidemic and prevent further widespread infections among workers.

Management

- Developed and instituted IH programs through effective change management process, impacting 85 countries, increasing engineering control implementation and reducing need for quantitative-evaluation consulting services by over 20%.
- Planned and executed highly potent (HPAPI) compound containment risk assessment and management strategy, achieving 50% improvement in potent compound containment across global manufacturing in 5 years, fully engaging engineering, operations and EHS communities in reaching goal.
- Designed sustainable industrial hygiene risk assessment strategy and tools, addressing prioritization of industrial hygiene goals and resources, resulting in 32% increase in manufacturing site exposure assessments and global program engagement.
- Reviewed, planned, and prepared EHS response to Statement of Work for TPMs, required for first trial as third-party manufacturer in clinical supply operations, leading team in completing multiple rounds of production of highly potent compound for other major pharmaceutical companies in collaboration with global pharmaceutical operations in high-containment facility.

Training

- Served as volunteer leader for past 9 years for globally endorsed Occupational Hygiene Training Association (OHTA) for development and proliferation of free, public-domain training modules, collaborating in creating module materials taught in over 55 countries and officially training over 8000 students regarding OH technical skills to universally impact and grow occupational hygiene profession.
- Directly addressed IH competency in global corporations by implementing training curriculum, impacting over 100 health and safety staff by providing endorsed training materials and tools for manufacturing-site-level industrial hygiene programs.

PROFESSIONAL EXPERIENCE

OCCUPATIONAL HEALTH MANAGEMENT, PLLC, Waterford, MI

2018 – Current

Principal Consultant / CEO

Provide health and safety program development strategies, audits, expert witness, and technical services to high-hazard industries to enable dramatically improved utilization of scarce resources for recognition, evaluation and control of workplace chemical, biological and physical hazards.

LAFARGEHOLCIM, Chicago, IL

2017 – 2018

Global / Group Occupational Hygiene Manager

Identify and address gaps in a low-maturity industrial hygiene (IH) program at global level. Developed and launched comprehensive risk assessment program to address recognition, qualitative and quantitative evaluation, and control of hazards inherent in building materials, cement, and construction industry.

ABBVIE BIOPHARMACEUTICALS, North Chicago, IL

Global Occupational Hygiene Manager – Manufacturing Operations (2013 – 2017)

Developed and implemented global occupational hygiene (OH) program for highly potent large and small-molecule containment, occupational hygiene staff professional development, and allocation capital project funding. Evaluated 13 primary and secondary manufacturing site programs throughout world via audit of monitoring plans, tracking of containment improvement plans and management of IH / OH service delivery.

ABBVIE BIOPHARMACEUTICALS, North Chicago, IL

Senior EHS Specialist – Research and Development (2011 – 2013)

Managed EHS operations for R&D Drug Product Development (DPD) business units, including active pharmaceutical ingredient analytical / formulations sciences, clinical supply production and packaging. Provided consulting services to clinical trial teams, pharmaceutical stability, and corporate culture committee leadership for interaction with business units throughout R&D.

BUSINESS HEALTH SYSTEMS, INC., Industrial Hygiene Consulting, Troy, MI; Madison, AL; & Port Barrington, IL **1994 – 2010**

Principal Consultant / CEO

Offered industrial hygiene program management services to over 215 organizations representing broad variety of industries, including pharmaceutical, automotive, healthcare, food, construction, and public-sector organizations, as well as US military operations.

EDUCATION

Master of Public Health (M.P.H.), Industrial Hygiene
UNIVERSITY OF MICHIGAN, Ann Arbor, MI

Bachelor of Science (B.S.), Medical Technology
MICHIGAN STATE UNIVERSITY, East Lansing, MI

CERTIFICATIONS

American Board of Industrial Hygiene (ABIH) Certification ID# 8512

Hazardous Materials Management (CHMM) Certification ID#13227

Ammunition and Explosives Certification Training (AMC-R350-4, ATEC-R 385-1, USAG-R 350-4)

PROFESSIONAL PUBLICATIONS, SPEAKING ENGAGEMENTS and PROFESSIONAL AFFILIATIONS and ADVOCACY

1. Publications Authored or Contributed To and National Public Interviews:

AIHA Synergist:

- a) “Dealing with Malpractice Protecting against the Misuse of Professional Titles” by Nancy M. McClellan, March 2013.
- b) “Moving Target Global Ethics in Industrial Hygiene Is a Continuous Process” by Nancy M. McClellan, June 2011.
- c) “Occupational Health Professionals Urge Chemical Manufacturers to Protect the Health of their Workers” <https://www.aiha.org/press/occupational-health-professionals-urge-chemical-manufacturers-to-protect-the-health-of-their-workers>
- d) AIHA and OHTA Sign Memorandum of Understanding <https://synergist.aiha.org/201802-aiha-ohta-sign-mou>

Facility Executive

- a) “Occupant Health Hinges On Indoor Air Quality”, by Deborah Hetrick and Nancy McClellan, December 14, 2020 [Occupant Health Hinges On Indoor Air Quality In Buildings \(facilityexecutive.com\)](https://facilityexecutive.com)

Chemical Engineering:

- a) "Today's Value of the Occupational Health and Safety Professional in Chemical Manufacturing", pending publication
- b) "Virus Countermeasures Drive Worker Safety" By Scott Jenkins | August 1, 2020 [Virus Countermeasures Drive Worker Safety - Chemical Engineering | Page 1 \(chemengonline.com\)](#)

ABC News:

- a) "How air purifiers and cleaners may help keep you safer indoors from COVID-19" By Eden David, July 1, 2020 <https://abcnews.go.com/Health/air-purifiers-cleaners-safer-indoors-covid-19/story?id=71520539>
- b) ABC Good Morning America Interview: "Experts Warn of Possible Risks With Indoor Gatherings for Holidays" – October 2020
<https://www.youtube.com/watch?v=LC7jSdSZZ7Y>

2. Professional Lectures and Audiences

- a) Professional Ethics in Industrial Hygiene – University of Michigan Comprehensive IH Reviews, Chicago Local Section Meetings, AIHce Professional Development Courses, Seattle Local Section Meetings, Michigan Local Section Meeting, Alabama Local Section Meetings
- b) IH Management Professional Development Courses – IOHA Conference, AIHce, University of Michigan Comprehensive IH Reviews, Alabama Local Section Meetings, Florida Local Section Meeting, Chicago Local Section Meetings, AbbVie EHS Conferences, Lafarge Holcim EHS Conferences
- c) Growing the IH Profession – BOHS Conferences, Irish OH Society, AIHce, Pharmaceutical Safety Conferences, Pharma Forums, Chicago Local Section, Highly Potent Active Pharmaceutical Ingredient Summits, AbbVie EHS Conferences
- d) Risk Assessment and Control Banding – BOHS Conference, IOHA Conference, Florida Local Section, AIHce, Multiple Client Professional Development Courses
- e) Personal Travel Safety – AIHce, AbbVie EHS Conference
- f) OHTA W501 – Measurement of Hazardous Substances – AbbVie IH Training Programs
- g) OHTA W506 – Ergonomics Essentials - AbbVie IH Training Programs
- h) OHTA W507 – Control of Hazardous Substances - AbbVie IH Training Programs
- i) IH Program Strategic Planning – AIHA Board of Director Sessions, OHTA Board of Director Sessions, Multiple Consulting Client Planning Sessions
- j) Pharmaceutical Containment Professional Development Courses – Highly Potent Active Pharmaceutical Ingredient Summits, Pharmaceutical Safety Group Meetings, Pharma Forum Meetings, Irish OH Society Conference, BOHS Conference, AbbVie EHS Conferences

3. Local, National and International Professional Advocacy

- a) ACGIH Member and Hazardous Bioaerosol Controls Committee Contributor 2020-Present
- b) Co-Chair Board of Directors and Leadership - Global Occupational Hygiene Training Association (OHTA) and OHlearning.com 2008-2020
- c) Coordinator/Author of the OHTA Pharmaceutical Training Module (In Progress)
- d) Chair of the Board, University of Michigan School of Public Health External Advisory Board. 2015-present
- e) Past Board of Directors for the American Industrial Hygiene Association 2015 – 2018
- f) Past Executive Board Member of the American Board of Industrial Hygiene (ABIH) 2006 – 2010. Founder of the ABIH Futures Committee to promote global IH initiatives.

- g) Course Director of AIHA/University of Michigan Comprehensive IH Review 1998-2004
- h) Michigan Industrial Hygiene Society – Local Section President, Board of Directors, Conference Planner and/or Member 1994-Present – Organized the first Counterterrorism and Weapons of Mass Destruction course in the state after the 911 tragedy. Contributed to the organized effort for state title protection for the IH profession.
- i) Alabama AIHA Local Section Board of Directors, Conference Planner and Member 2004-2010
- j) Chicago AIHA Local Section Board of Directors, Conference Planner, and Member 2010- present
- k) British Occupational Hygiene Society Member 2015-2017
- l) Irish Occupational Hygiene Society Member 2015-2017