Exponent
320 Goddard
Suite 200
Irvine, CA 92618

telephone 949-242-6000
facsimile 949-242-6099
www.exponent.com

Richard L. Wade, Ph.D., M.P.H.

Principal Scientist
Clinical Professor of Medicine University of California Irvine

Professional Profile

Dr. Richard L. Wade is a Principal Scientist in Exponent's Health Sciences practice. He is a health scientist with 37 years of experience in the development and management of environmental health programs. This work has included the management of regulatory agencies, the development of corporate environmental health and safety programs, and project management for large environmental restoration and enhancement projects. Dr. Wade's experience includes management of state and local public health departments, as well as state occupational health and safety programs. He has also developed comprehensive environmental health and safety risk management programs for three large international corporations. His experience has included new program development, regulatory standards development, management of regulatory agencies, and the creation of analytic laboratories and health risk assessment groups. Programmatic responsibilities include regulatory compliance for drinking water, wastewater, air, radiation, occupational safety, occupational health, noise, food and agricultural practices as related to public health, solid waste, hazardous chemical and hazardous waste management, emergency response to environmental incidents worldwide, and worldwide environmental health and safety regulatory compliance.

Dr. Wade's experience has included the scoping and implementation of the clean air act, clean water act, food and water standards, and the occupational health and safety act. His regulatory work includes food and water quality, noise, solid and hazardous waste, migrant housing, health risk assessments, industrial hygiene, corporate safety, environmental analytic services, radiological health, and occupational health.

As a regulator he worked on many issues involving both chemical as well as biological agents. During his tenure working in health agencies and his corporate experience he worked of notable investigations on Encephalitis, Q fever, HIV , E coli outbreaks, Salmonella, Staphylococcus, food born disease outbreaks , asbestos in drinking water, Legionella, Botulism, Cryptosporidium , vector borne diseases, blood borne pathogens, Noro viruses, and Hepatitis. He has worked on projects in conjunction with FDA, USDA, WHO and many State and local health agencies.

Significant accomplishments included work on remediation of PAH contaminated drinking water, asbestos contamination in drinking water, revisions to the food codes State of Minnesota, Seattle /King County, and USPH (CDC) vessel sanitation code. As a one-time Deputy Chief of Cal OSHA, he was responsible for enforcement of OSHA regulations, and radiation protection in the State of California. In addition Dr. Wade was responsible for the standards development group within Cal OSHA. Significant achievements included revisions to all the Cal. OSHA health standards, setting new standards for asbestos exposure, banning the use of Ethylene Di-Bromide in California, and work on several significant PCB and Dioxin de-contamination

projects. Dr .Wade has worked on contaminated medical devises and with pharmaceutical companies for US FDA manufacturing compliance. He has designed many methods and plans for both chemical and microbiological decontamination of equipment, buildings, and materials.

Dr. Wade has also held the position as director of Emergency Response and Risk Management Services for International Technology Corporation. Significant projects he managed included PCB and Dioxin decontamination projects for EDF in France, site assessment and remediation of a 20 tank cars of hazardous chemicals derailment that dumped into an Arkansas River, and the decontamination of many industrial chemical and biological hazards sites.

Directly prior to joining Exponent, Dr. Wade managed his own consulting company Risk Management Sciences, which specialized in corporate risk management consultancy to large international corporations. Significant projects included the development of international risk management and compliance programs for environmental, health and safety for P&O shipping London, England and Norwegian Cruise Lines, Miami, Florida.

Academic Credentials and Professional Honors

Post Doctoral Training, Executive Training Program in Health Policy and Management, Harvard University,
Ph.D., Environmental Health Sciences, University of Michigan,
M.P.H., Environmental Health, University of Michigan,
B.S., Biological Chemistry, University of New Hampshire

National Associate (lifetime honorary appointment) of the National Research Council/ National Academy Sciences, 2008

Fellow, National Environmental Health Association; Rockefeller Fellow, University of Michigan, 1971–1972

Lifetime Achievement Award, American Public Health Association, 2000; Alpha Zeta Honorary Society; Smithsonian Institutes Award For Excellence in Environmental Program Management, 2000; British Airlines award for achievements in environmental tourism, 1998; Student Fellowship, Calver Memorial Environmental Health Award, American Public Health Association, 1970; National Sanitation Foundation, 1973

Licenses and Certifications

Registered Environmental Assessor, California, Registration #00222
Certified Hazardous Material Specialist, Certification #HW-147
Certified Trainer in Food Safety and HACCP

Selected Publications

Contributing author: Principles of Safety Management. Textbook on Safety Management. Published by the National Safety Council, Vol. 1 and 2, 1999.

Wade RL. Pollution control technologies for ocean going passenger ships. Proceedings, Conference on Marine Debris, Society of Marine Engineers New Orleans, LA, 1994.

Fedoruck J, Bosan W, Wade R. Utilization of analytical data and risk assessment methods for determination safe re-use levels of shorelines, following a major off shore oil spill. Proceedings, Hazmat Conference, Long Beach, CA, 1992.

Wade RL. Limitations on utilization of analytic detection limits under Proposition 65 in the state of California. Hazmat West, Long Beach, CA, 1990.

Woodyard J, Wade RL. Development of decontamination guidelines for PCB\PCDF and PCDD decontamination in areas of high exposure potential. In: Book on Hazards, Decontamination and Replacement of PCB's. Plenum Press, New York, 1989.

Wade RL. Verification of engineering site audits to quantify risk and liability from pollution. JASA, 1988.

Osterloh J, Cone J, Harrison R, Wade R, Becker C. Pilot survey of urinary prophyrins from persons transiently exposed to a PCB transformer fire. Chem Toxicol 1987; 24(6):533–544.

Woodyard J, Wade RL. Sampling and decontamination methods for buildings and equipment contaminated with TCDD or equivalents. Managing Hazardous Materials, The TCDD Experience, Exner E (ed), American Chemical Society, New York City, NY, 1987.

Wade RL. Role of risk management engineering in reducing pollution liability. Proceedings, Haz Mat West, Conference Proceedings, Long Beach, CA, 1986.

Wade RL. Utilization of quantitative health risk assessment techniques in determination of acceptable decontamination standards. Electric Power Research Institute, Palo Alto, CA, 1985.

Letz GA, Pond SM, Osterloh, Wade R. Acute toxicity of ethylene dibromide toxicity: a case study of two fatalities. J Am Med Assoc 1984.

Wade RL. Qualitative and quantitative assessment of the toxicity of ethylene dibromide. American Public Health Association, Montreal, Canada, 1983.

Wade RL. Combustion toxicity—Methods of chemical decontamination. John F. Redmond Foundation, Toronto, Canada, Int Fire Fighter, 1983.

Wade RL. Technological advances in occupational health in the 1980's. West J Occup Med, October 1983.

Wade RL. Project manager and co- author, Health Hazards in the Semiconductor Industry. Publication of State of California, 1982.

Wade RL. Principles of decontamination following exposure to toxic materials encountered in fire fighting operations. Calif Fire Fighter, July 1981.

Wade RL, Co -author. Guidelines for hazardous chemical response for state and local resources for the state of California. Publication of the Governor's Office of Emergency Response, 1979.

Garry V, Hozier J, Jacobs D, Wade R, Gray D. Ethylene oxide: Evidence of human chromosomal effects. Environ Mutagenesis 1979; 375–382.

Gray D, Wade R. Methyl mercury residues and toxicity in fish in northern Minnesota. State of Minnesota Press, 1978.

Gray D, Wade R. Health implications of polynuclear aromatic hydrocarbons in St. Louis Park drinking water. State of Minnesota Press, 1978.

Wade RL. Systematic management of hazardous waste. Proceedings of Legislative Workshop, Minnesota State Legislature, State of Minnesota Press, 1977.

Wade RL. Health effects of small particulate materials. Environment 1975.

Wade RL. Urban air pollution. Chapter in Text on Urban Health Issues. Council on Environmental Quality, New York City, NY, 1974.

Wade RL. Environmental health: A lack of federal concern. J Nat Environ Health Assoc, December 1973.

Carnow B, Morris S, Wade RL. The health effects of a national energy policy. Ford Foundation Publication, 1973.

Wade RL. Concern for environmental quality as a factor in energy supply and demand schedules. Proceedings of Airlines Public Relations Conference, 1973.

Wade RL. The role of health standards in improving health services in correctional institutions. Proceedings of Conference on Health Care in Correctional Institutions, Minneapolis, MN, 1972.

Wade RL. The benefits of pollution (cost-benefit analysis). Ecology Today, 1972.

Presentations

Numerous presentations to local, state and national, professional associations, state legislative conferences, and meetings.

Lectures at Tulane University, Howard University, Harvard University, University of Michigan, Minnesota, Washington, and California (Davis, Berkeley, San Francisco Medical Center, Santa Barbara, Irvine Medical School).

Academic Appointments

- Clinical Associate Professor, University of California Medical Center, San Francisco, CA, 1979–2007
- Clinical Adjunct Professor of Medicine University of California, Irvine, Present
- Instructor, University of California, Davis, Certification Program in Hazardous Materials Management, 1981–1987
- Adjunct Assistant Professor, University of Washington, Seattle, Washington, School of Public Health, 1973–1975
- Adjunct Associate Professor, University of Minnesota, School of Public Health, Minneapolis, Minnesota, 1975–1979

Professional Affiliations

- American Institute of Chemistry
- National Association of Infection Control Professionals
- Member, National Academy of Sciences, Naval Studies Board, 2001–2008
- American Public Health Association (Past Officer)
- American Chemical Society (Past Program Organizer)
- Local Public Health and Industrial Hygiene Associations (Past Officer)
- National Safety Council (Past Member)