



HYGIENETECH

Hygiene Technologies International, Inc.

46 Peninsula Center Drive, Suite E 349
Rolling Hills Estates, California 90274-3562
(310) 370-8370
(310) 370-2474 FAX
www.hygienetech.com

BRIAN P. DALY, CIH, PE

I am an industrial hygienist, safety engineer, and environmental health scientist, with degrees in Health Science, Environmental and Occupational Health. I have experience in the areas of occupational hygiene, industrial safety, chemical hazard assessment, microbial growth and exposure assessment, noise exposure evaluation and control, indoor air quality, injury and illness prevention, health and safety training, and emergency response coordination. My professional responsibilities include the anticipation, recognition, evaluation, and control of chemical, physical, and biological stressors, and identification and control of safety hazards in varied indoor and outdoor occupational, residential, and commercial building environments.

EDUCATION AND TRAINING

- Master of Science, Health Science, Environmental and Occupational Health, California State University, Northridge, California, 1983
- Bachelor of Science, Health Science, Environmental and Occupational Health, California State University, Northridge, California, 1978
- Hazardous Waste Operations and Emergency Response Training pursuant to Title 29, Code of Federal Regulations, Part 1910, Section 120, Environmental Training Associates, Costa Mesa, California, 1988

CERTIFICATIONS AND REGISTRATIONS

- Certified Industrial Hygienist, Comprehensive Practice, Board for Global EHS Credentialing (formerly the American Board of Industrial Hygiene), Number 3373, 1986
- Registered Professional Engineer, Safety, State of California, Number SF 3380, 1997

EXPERIENCE AND BACKGROUND

1998 - Present **Hygiene Technologies International, Inc., Los Angeles, California**
President

Since forming the firm in 1998, I have managed a staff of industrial hygienists, safety professionals, engineers, environmental assessors, asbestos consultants, and environmental and public health specialists. I provide technical direction during projects involving industrial hygiene; indoor air quality; microbial growth assessment and abatement; soot, char, and ash assessment; safety engineering; environmental health issues; OSHA regulations; injury and illness prevention; accident investigation; hazard communication; asbestos hazard and abatement consulting; lead hazard assessment and abatement consulting, noise



EXPERIENCE AND BACKGROUND (CONTINUED)

1998 - Present **Hygiene Technologies International, Inc., Los Angeles, California**
(Continued) President

exposure and control; confined space entry; tunnel and underground shaft gas testing; health and safety program and policy development; waste analysis; evaluation of ventilation systems and other engineering controls; assignment of personal protective equipment including respiratory protection; drinking water quality assessment; material safety data sheet (MSDS) development; emergency response coordination and emergency preparedness; and international occupational health and safety regulations.

I provide training on a variety of employee health and safety topics, such as accident investigation, air-supplied and air-purifying respirators, air monitoring and sampling techniques, asbestos health hazards, bacteria- and mold-related health hazards, bloodborne pathogens, chemical hazards, chemical hygiene plans, cold stress, confined space entry, decontamination, drilling safety hazards, drum sampling and handling, excavation safety, exposure guidelines, flammability hazards, fungal growth assessment and abatement, brushfire emission exposure, hazard recognition, hazard categorization, worker right-to-know (hazard communication), hearing conservation, heat stress, indoor air quality, lead health hazards, injury and illness prevention programs, medical surveillance and biological monitoring, noise and noise control, care and use of personal protective equipment, regulatory overview, safe work practices, self-contained breathing apparatus care and use, site characterization, site control, site emergencies and action plans, site health and safety plans, spill control, toxicology, CPR guidelines, and hazardous waste operations.

I assist clients in developing cost-effective engineering controls that will reduce the potential for injury and/or loss of property. I prepare Infection Control Risk Assessments (ICRA) in hospitals prior to construction and abatement work projects. I review and assist in drafting company policies, bid specifications, and site health and safety plans concerning geotechnical activities, soil excavation, and hazardous material/waste handling activities. I conduct medical center-specific training programs involving varied topics, such as the health hazards associated with exposures to allergens, specific molds and bacteria, irritants, carcinogens, corrosives, noise and ionizing radiation, and to specific chemicals such as asbestos, benzene, lead, PCBs (and dioxins and furans); indoor air quality; soot, char, and ash; and hazardous waste operations and emergency response.

I conduct and supervise fungal and bacterial growth assessment and exposure surveys, primarily in buildings that have had known water intrusion events, such as those caused by window or roof leaks, groundwater seepage, plumbing failures, or sewage spills. I use direct-reading instruments to determine moisture content data in varying building materials. I collect surface samples from building materials to assess fungal and bacterial growth potentials, and air samples to determine concentrations of both viable and nonviable fungi, and viable bacteria. I identify microbes and assess health hazard potentials, identify the sources of water that are potentially attributable to the biological growth, develop abatement strategies, and establish appropriate engineering and personal protective equipment controls during any anticipated remediation work. I provide general consulting during abatement projects, and perform site surveillance, air



EXPERIENCE AND BACKGROUND (CONTINUED)

1998 - Present **Hygiene Technologies International, Inc., Los Angeles, California**
(Continued) President

monitoring, and surface sampling on such sites. When appropriate, bulk and/or surface samples are collected of food, drinking water, soil, and other matrices in order to determine concentrations of fungal, bacterial, protozoan contamination, or soot, char, and ash. Target microbes have included *Stachybotrys chartarum*, along with species of *Chaetomium*, *Aspergillus*, and *Penicillium* genera; *Cryptococcus neoformans*, an encapsulated yeast; *Escherichia coli* (*E. coli*) and *Legionella pneumophila* bacteria; and *Entamoeba histolytica*.

I consult on health and safety issues as they relate to hazardous waste handling, packaging, minimization, treatment and transportation; and I provide health and safety coordination for emergency response teams involved in hazardous waste spill remediation on land and waterways.

I provide expert witness consultation, along with deposition and trial testimony, in connection with claims of industrial accidents and injuries; reported exposures to chemicals, microbes, invertebrates, and allergens, and noise and other physical agents; claims of occupationally-related illnesses and injuries, including leukemia, mesothelioma, interstitial pulmonary fibrosis, mycotoxin effects, allergic sensitization, and hearing loss; fungal and bacterial growth assessment; soot, char, and ash assessment; as well as claims of chemical contamination in air, in liquids, and on solid surfaces. Cases have involved issues concerning asbestos, benzene, fungal and bacterial growth, hazardous waste operations and emergency response, lead and welding fume, methylene chloride and other hydrocarbons, pesticides, oxygen-deficient and oxygen-enriched atmospheres, ventilation systems, use of personal protective equipment, as well as amputations, confined space entry, work at elevated platforms, indoor air quality, lock out/tag out procedures, OSHA and EPA regulation compliance, MSDS requirements, employers' general duty to warn, accident reconstruction, fire incidents, and habitability issues.

1987 - 1998 **EnviroHealth, Inc., Long Beach, California**
Technical Director

I performed environmental air monitoring and occupational health and safety surveys for the purposes of anticipating, identifying, evaluating and controlling hazards in the workplace. Services included industrial hygiene evaluations, indoor air quality surveys, hazardous material/waste handling consulting, health and safety training, preparation of site health and safety plans, building hazard assessments, asbestos-containing building material identification surveys, asbestos abatement site surveillance and consulting, and hazardous material/waste emergency response coordination. I provided interpretations of exposures in light of OSHA, EPA, and other environmental and occupational health regulations and guidelines. I conducted training programs on varied topics including hazardous waste operations and emergency response, hearing conservation, hazard communication, asbestos health hazards, respiratory protection,



EXPERIENCE AND BACKGROUND (CONTINUED)

1987 - 1998 **EnviroHealth, Inc., Long Beach, California**
(Continued) Technical Director

and confined space entry. I developed cost-effective engineering controls that reduced the potential for injury and/or loss of property. I conducted fungal and bacterial growth assessment and exposure surveys in buildings that had known water intrusion events, such as those caused by window or roof leaks, groundwater seepage, plumbing failures, or sewage spills. I developed fungal growth and bacterial growth abatement strategies and established appropriate engineering and personal protective equipment use protocols during anticipated remediation work. I provided project design and general consulting during asbestos, lead-based paint, and biological growth abatement projects, and I performed site surveillance, air monitoring, and surface clearance sampling on such sites.

1984 - 1987 **IT Corporation, Cerritos, California**
Senior Industrial Hygienist (final position)

I provided industrial hygiene services on a consulting basis to clientele in varying industries. I conducted surveys designed to identify employee exposures to chemical substances such as welding fume, petroleum hydrocarbons, lead, inorganic acids, and asbestos. I also conducted surveys to determine worker exposures to noise, heat and other physical agents; assisted clients in interpreting data in light of current OSHA, EPA, and other regulatory standards; and recommended control measures and conducted related health and safety training programs. I provided health and safety assistance to operating divisions of IT Corporation and I conducted industrial hygiene and safety surveys on sites associated with hazardous waste management. I provided on-site health and safety supervision and technical assistance for emergency response operations, including sites at which spills and/or fires occurred involving PCBs, methyl mercaptan, fuels, and other hydrocarbons; acids and other corrosives; oxidizers; and unidentified particulate. I made recommendations concerning administrative and engineering controls based on employee exposure potentials, and I established personal protective equipment use protocols during abatement operations and during emergency response remediation. Responsibilities also included technical research, health and safety training instruction, and accident investigation and reconstruction.

1982 - 1984 **Argonaut Insurance Companies, Los Angeles, California**
Senior Loss Control Consultant

I assisted policyholders in developing and implementing continuing health and safety programs. Loss control activities included conducting industrial hygiene and safety surveys as well as presenting loss statistics and experience modification ratings to management in industry, labor unions, and employee groups. I consulted on Cal-OSHA regulations, hazardous material handling and storage, health hazards,



EXPERIENCE AND BACKGROUND (CONTINUED)

1982 - 1984 **Argonaut Insurance Companies, Los Angeles, California**
(Continued) Senior Loss Control Consultant

and respiratory protection. I conducted health and safety training presentations on hazard communication, personal protective equipment, confined space entry, emergency action plans, fire protection equipment, accident investigation, and hearing conservation.

1980 - 1982 **Safety Engineering Laboratories, Chatsworth, California**
Safety Engineer

I consulted regarding a variety of health and safety matters including accident investigations involving machine guarding, consumer product design, structural fires, chemical exposures, and use of personal protective equipment. I calculated coefficient of friction data during slip and fall investigations, and I conducted vehicular accident investigations during which closing speeds were estimated, and yaw marks and other physical evidence were used to determine causes of collisions. I conducted failure analysis experiments designed to evaluate product safety; I conducted OSHA-like audits in industrial facilities; and I consulted on matters concerning plant layout and emergency action plans and procedures. I conducted surveys designed to identify employee exposures to chemical substances such as carbon monoxide, particulate (including soot, char, and ash), petroleum hydrocarbons, inorganic acids, welding fume, lead, and asbestos. I also conducted surveys designed to determine worker exposures to noise, heat, and flammable atmospheres. I assisted clients in interpreting data in light of current Cal-OSHA regulatory standards and ACGIH threshold limit values, and I recommended administrative engineering control measures designed to reduce exposure potentials and eliminate fire hazard potentials. I reviewed pertinent data in order to develop and draft comprehensive health and safety policies and programs for industrial clients, and I trained personnel regarding hazardous material/waste handling and storage, care and use of personal protective equipment, machine operation and guarding, site inspection techniques, and accident prevention and investigation procedures.

PAPERS AND PRESENTATIONS

- “Fungal Growth: Hazard and Assessment,” panel speaker, presented at the Orange County Bar Association, Construction Law Section, Newport Beach, California, January 2011
- “Occupational Health and Safety Qualitative Assessment during Oil Refining,” presented at the China International Petroleum and Chemical Industry-sponsored Safety and Occupational Health Forum, Nanjing, China, October 2008
- Fundamentals of Industrial Hygiene Course, AIHA faculty, Shanghai, China, October 2008
- “Recognizing and Evaluating Workplace Exposures,” workshop panel speaker, presented at the AIHA-Sponsored Sino-U.S. Occupational Health Summit Forum, Beijing, China, September 2007



PAPERS AND PRESENTATIONS (CONTINUED)

- “AIHA International Affairs: An Overview,” presented to the American Industrial Hygiene Association Northern California local section, San Francisco, California, March 2007
- “Industrial/Occupational Hygiene: Going Global,” presented to the American Industrial Hygiene Association Orange County local section, Irvine, California, August 2006
- “Mold Litigation,” panel speaker, California, NBI, Los Angeles, California, August 2006
- “Reducing Workers’ Compensation Claims and Costs in Your Company,” panel speaker, National Business Institute, Irvine, California, January 2006
- “Industrial Hygiene in the United States: An Overview,” HygieneTech-Ministry of Health Occupational Health Forum, Beijing, China, November 2003
- “The Mold Challenge in California,” panel speaker, National Business Institute, Los Angeles and Anaheim, California, August 2003
- “Fungal Growth: Assessment Strategies and Remedies,” Los Angeles, Sacramento, and Fresno, California, May 2002
- “Diesel Exhaust Exposure Potentials in Santa Ana Fire Stations,” presented to Public Agency Safety Management Association (PASMA), Palm Springs, California, 1999
- “Fungal Growth: Is There a Problem?” Los Angeles, San Francisco, and Sacramento, California, 1998, 1999, 2000, and 2001
- “Health and Safety Activities at Hazardous Waste Sites: An Overview,” presented at the Department of Occupational Health, School of Public Health, Shanghai Medical University, Shanghai China; and at the Guangzhou Occupational Disease Prevention and Treatment Center, Guangzhou Industrial Hygiene Monitoring Station, Guangzhou, China, June 1994
- “Health and Safety Programs at Selected Industrial Sites in Poland, Hungary, and Czech Republic,” American Industrial Hygiene Association Orange County local section in Irvine, California, June 1993
- “Evaluation of the Krajska Hygienicka Stanice Stredoceskeho Krase Regional Hygienic Station of Central Bohemia,” presented in association with a People-to-People delegation, Prague, Czech Republic, September 1992
- “Noise and Noise Control” presented at Comprehensive Industrial Hygiene Certification Review Course, MBA, Inc., 1989 through 1994

PROFESSIONAL AFFILIATIONS

- American Industrial Hygiene Association
- American Industrial Hygiene Association, International Affairs Committee, Past Chair
- American Industrial Hygiene Foundation, formerly on the Board of Directors and Past President
- American Academy of Industrial Hygiene
- International Occupational Hygiene Association
- American Conference of Governmental Industrial Hygienists
- American Society of Safety Professionals, Long Beach Chapter