CURRICULUM VITAE

Richard E. Twomey, MS, CSP Safety Engineer

Twomey Safety Engineering 147 Grassy Hill Rd East Lyme, CT 06333 www.twomeysafety.com Office 860-442-8340 Fax 860-444-1602 Cell 860-867-7511 rettse@snet.net

PRACTICE AREAS

- Safety consultant for general industry, construction and shipyards
- Expert witness for employee injuries, general liability and products liability cases

QUALIFICATION HIGHLIGHTS

President and Principal Safety Consultant, Twomey Safety Engineering (Estab. 1993)

- Providing monthly health and safety services both on-site and at other job locations for a large steel fabricator in Boston.
- Providing monthly health and safety services for seven textile manufacturing plants in Connecticut.
- Providing monthly health and safety services for a printing company in Connecticut.
- Conducting OSHA training in bloodborne pathogens, electrical safety, lockout/tagout, hazard communication, hearing conservation, machine guarding and respiratory protection at several manufacturing plants.
- Conducting management, health and safety audits for a large global manufacturing company.
- Completing approximately 100 property, liability and Workers' Compensation inspections in New England and New York for various insurance companies.

Director of Health and Safety, Loureiro Engineering Associates, Inc.

- Conducted more than 30 week long audits of health and safety management systems in the U.S. and Canada for a large Connecticut manufacturing company.
- Wrote OSHA HAZWOPER health and safety plans based upon site characterizations over four year period for hazardous waste and EPA superfund sites.
- Conducted OSHA HAZWOPER training classes for Loureiro's environmental and construction personnel for four years.

Corporate Manager, Health and Safety, U.S. Surgical Corporation

- Managed the health and safety program for the Connecticut and Puerto Rico facilities for a large medical device manufacturing company.
- Supervised a senior safety specialist, ergonomics coordinator and two occupational nurses, and worked with the medical director on health and safety issues.
- Instituted safety teams and a comprehensive ergonomics program.
- Performed a hazard analysis for startup of a new chemical plant.
- Implemented state of the art machine guarding program for large packaging, printing and automated assembly machinery in medical device manufacturing. This included installation of coded magnetic interlocks, pendant jog controls, emergency stops and PLC controls.
- Worked with a consultant in testing materials to attenuate noise in a large suture braiding machine operation.
 Conducted noise dosimetry and sampled sound levels for several proposed acoustic materials in a suture braiding test cell.
- Worked with three certified professional ergonomists in plant surveys and consulted with professors in ergonomics at the University of Michigan and University of Connecticut Ergo Center as well as conducted hundreds of worksite risk assessments with my ergonomics coordinator in developing a state of the art ergonomics program. This program was instrumental in reducing Workers' Compensation costs by more than one million dollars over two years and for winning safety and health awards from the Connecticut Business and Industry Association and the State of Connecticut Workers' Compensation Department.

Conducted many inspections and developed process safety management programs for chemical plant operations
and suture manufacturing. Suture manufacturing involves monomer and polymer manufacturing along with
solvent recovery operations.

Senior Safety Engineer, Electric Boat Division, General Dynamics Corporation

- Conducted daily health and safety inspections of facilities and ships under construction for eight years.
- Implemented the lockout/tagout program including writing the machine specific procedures for more than one thousand machines.
- Worked on the electrical safety related work practices program.
- Evaluated machine guarding and assisted in installation of safeguarding devices on many press brakes, power presses, ironworkers, milling machines and many types of woodworking equipment.
- Conducted thousands of confined space tank audits.
- Evaluated and advised personnel in hundreds of scaffolding/fall protection jobs.

Senior Safety Engineer, Travelers Insurance Company

- Conducted several thousand property, liability, products and Workers' Compensation loss control surveys over a ten-year period.
- Conducted hundreds of legal inspections as a New York State licensed boiler inspector and certified elevator inspector.
- Conducted plant fire inspections and tested fire protection equipment such as fire mains, pumps and sprinkler systems.
- Acted as safety consultant in Workers' Compensation for many large manufacturers.
- Developed significant expertise in machine guarding.

Expert Witness

Expert witness cases completed during 1997-03 include:

- Employee fall from a forklift basket while installing electrical wires
- Employee fall in a pit on a construction site
- Employee fatally crushed in a production machine
- Employee's leg crushed and amputated from falling material on a construction site
- Employee respiratory problems due to installation of carpet in a hospital
- Employee occupational asthma due to poor indoor air quality
- Police officer injury caused by the interior partition in a police car during a rollover accident
- Serious consumer skin burn from using sulfuric acid drain cleaner
- Soccer player knee injury on an artificial playing surface
- Injuries involving a car convertible top, a treadmill and a tree stand
- Employee injury in hospital elevator accident where floor failed
- Chemical inhalation by employees in adjacent occupancy to a dry cleaner
- Fall injuries in apartment houses, supermarkets, stores, theaters, etc.

Instructor

- Organized, trained and worked with 12 safety committees over the last 14 years. My guidance was instrumental
 in these committees coming up with many innovative solutions to workplace problems. Examples include lifting
 gear for cranes in the shipyard, adjustable footrests for manufacturing assembly workstations and a lifting device
 for handling heavy rolls of plastic. 1987 2001
- Presented a speech to industry representatives, "What to Do When OSHA Comes Knocking" at the University of Connecticut Safety Symposium. 2000
- Taught the Connecticut ASSE Certified Safety Professional Review Course Section on Facilities and Equipment. 1992, 1993

PROFESSIONAL EXPERIENCE

1993 – Present	President Twomey Safety Engineering East Lyme, CT
1998 – 2001	Director, Health and Safety Loureiro Engineering Associates Plainville, CT
1995 – 1998	Manager, Corporate Health and Safety United States Surgical Corporation North Haven, CT
1987 – 1995	Senior Safety Engineer Electric Boat Division, General Dynamics Corporation Groton, CT
1977 – 1987	Senior Safety Engineer Travelers Insurance Company Albany, NY
1969 – 1977	Owner, Motel and Restaurants Ogunquit & Portland, ME
1965 – 1969	Marine Engineer Marine Engineers Beneficial Association, District 2 Brooklyn, NY

EDUCATION

MS, Occupational Safety and Health Management University of New Haven New Haven, CT

BS, Mechanical Engineering Union College Schenectady, NY

BS, Marine Engineering Maine Maritime Academy Castine, ME

Industrial Hygiene Course, Harvard University

Mechanical Engineering, Rennselaer Polytechnic Institute, Troy, NY

Business Administration, University Of Maine, Portland, ME

CERTIFICATIONS AND AFFILIATIONS

Certified Safety Professional, Board of Certified Safety Professionals

Licensed Marine Engineer

National Board Certified Boiler Inspector

Member, American Society of Safety Engineers

Member, American Industrial Hygiene Association

Member, National Safety Council

Member, National Floor Safety Institute

Member, National Fire Protection Association

Member, Society of Automotive Engineers International

Former President & Current Vice President, Connecticut Chapter, Maine Maritime Academy Alumni Association