Edwin P. Granberry, Jr.

Curriculum Vitae

SUMMARY

Over 60 years employed in the Safety Engineering, Industrial Hygiene, Environmental Affairs, Radiation Safety and Chemical professions with direct hands-on experience in the following areas of specialization:

OSHA Compliance (29CFR 1910 & 1926) Material Handling – High Value Products EPA Compliance (40CFR) Indoor Air Quality Evaluations / Audits **Chemical Munitions Audits** Phase 1 & II Environmental Assessments (ASTM 1527) Chemical Process Operations Safety Accident Investigation / Hazard Assessments Aircraft & Marine Cargo Operations Mechanical & Explosive Demolition Safety Procedures **Machine Guarding** Forensic Chemistry / Chemical Engineering Matters Disaster Planning & Evaluation Radiation Safety Programs/Aircraft Engines & Test Stands **Confined Space Entry Operations** Safety Training Courses [Preparation & Presentation] Warnings & Product Labeling Toxic Substances Evaluations & Audits IRBM / Artillery Logistics & Tactics Explosives / Ordnance Operations Safety

PROFESSIONAL EXPERIENCE

1989 to Present Granberry Consulting Services, LLC Winter Park, FL

Managing Member & Principal Consultant

Chemical / Safety / Environmental / Forensic / Demolition Consultants to industry, insurance companies, defense contractors, government agencies, counties, municipalities and law firms specializing in accident investigation, hazardous materials / waste management, chemical safety, munitions audits, aviation / aerospace safety, demolition operations, cryogenics, material handling / machine guarding, safety training, emergency response and disaster preparedness programs. Qualified and accepted as an expert witness by the courts in the areas of Occupational Safety & OSHA Compliance (29CFR 1910 & 1926), Chemistry / Chemical Reactions / Chemical Exposures, Industrial Hygiene, Illumination, Slips, Trips and Falls, Environmental Affairs (40 CFR - EPA), CERCLA Audits (Phase I / Phase II), Indoor Air Quality, Hazardous Waste Management, Coefficient of Friction Measurement, Warnings and Product Labeling, Emergency Response

2001 to Present Controlled Demolition Inc. Phoenix, MD

Corporate Safety Director

Responsible for design and on-site implementation of a comprehensive Safety, Industrial Hygiene, and Environmental program for demolition operations (mechanical / explosive). Supervise pre - implosion safety operations on-site. Responsible for compliance with 29CFR 1910 & 1926 Regulations, NFPA, EPA (40 CFR Regulations) and other applicable codes and ordinances. Serve as Corporate Safety Training Officer for CDI employees.

Operations, Fall Arrest Systems / Protection and Machine Guarding

1989 United Technologies Corporation, Chemical Systems Division San Jose, CA

Project Manager - Safety & Environmental Affairs

Responsible for the effective management of all Safety and Environmental Engineering activities: Manufacturing munitions and propellant recovery operations in Nevada and Kansas facilities operated by CSD.

1987 to 1989 United Technologies Corporation, Chemical Systems Division, San Jose, CA

Manager - Industrial & Systems Safety Engineering

Responsible for management / administration of the following programs: Industrial Safety; Systems Safety; Explosive Safety; Environmental Engineering; Industrial Hygiene; Occupational Medical Services, and Hazardous Materials Operations. Managed a department of 58 professionals.

1972 to 1987 United Technologies Corporation, Pratt & Whitney Aircraft, West Palm Beach, FL

Manager - Safety Engineering / Industrial Hygiene / Radiation Safety Officer
Responsible for management/administration of Safety Engineering and Industrial
Hygiene Programs for a 9,500 employee work force at an aircraft / rocket engine research
and development facility. Managed a department of 12 professionals. Responsible for all
Safety Engineering, Materials Handling, Machine Guarding, Safety Training, Industrial
Hygiene Operations, and Radiation Safety Programs. Workers Compensation Program
Manager, coordination with Liberty Mutual Insurance Company representatives (local
and corporate).

1984 to 1987 **Palm Beach County Fire Rescue Department** West Palm Beach, FL

Consultant to Chief and Battalion Chiefs for Explosive Ordnance Disposal, Environmental Matters and Chemical Disposal, training of Emergency Response Units, training for "Broken Arrow" Drill and other Municipal Disasters.

1982 to 1986 IBM Corp. Boca Raton, FL

Consultant to IBM Safety Engineering Manager for various Programs required at this facility

1964 to 1972 **Pan American World Airways, Aerospace Services Division**, Cape Canaveral Air Force Station, FL

Superintendent - Industrial Safety Operations - Worldwide

Responsible for management / administration of a worldwide (North / South America, Africa, Asia, Indian and Pacific Oceans) Safety Program for a 14,500 employee work force operating the U.S. Air Force Eastern Test Range. Operations involved: Industrial Safety Program - all types of facilities (explosive storage; cryogenic; launch complexes, etc.); Marine & Aircraft Cargo Operations Safety and Airfield Safety at all Down Range Tracking Stations; Responsible for Fire Prevention / Fire Fighting Procedures and Tactics. Managed a department of 18 professionals.

1962 to 1964 **Pan American World Airways, Aerospace Services Division**, Cape Canaveral Air Force Station, FL

Launch Safety Officer, Assistant Radiation Safety Officer: Responsible for the following safety operations: Launch Safety Officer on-board nuclear submarines (USS Andrew Jackson and others) launching Polaris and Poseidon missiles on the Air Force Eastern Test Range

Launch Safety Officer - Land launched missiles (solid / liquid propellant systems) [Pershing, Minuteman, Arcas. Loki, Polaris III]

Task Unit Commander, Launch Site Recovery Force - Mercury 8 and 9 manned launches (Wally Schirra, Gordon Cooper)

Test Conductor - High Altitude Weather Research Rocket Program, Cape Canaveral, FL

1958 to 1962 Martin Company, Orlando, FL

Manufacturing Research Technical Writer & Engineer – Manufacturing Research
Department: Prepared technical reports for various engineering projects e.g., High
Temperature Fuel Carburetion, Development of an Ablation Nose Cone for Intermediate
Range Ballistic Missiles; Design and Installation of Missile Wire Harnesses Using the
Human Body as a Base Line

Weapons System Engineer - Military Units Training Department
Responsible for training units of the U.S. Army Ordnance Corps / Field Artillery and selected units of the West German Air Force on the propulsion system, tracked vehicle units and launch platforms for the Pershing missile weapons system. Primary Instructor for training classes in Propulsion & Ignition Systems, XM - 474 Tracked Vehicle Operations, M 246 Wrecker operations and Weapons Systems Battalion Field Firing Operations

CERTIFICATIONS / PROFESSIONAL MEMBERSHIPS

Certificate – Hazardous Materials Chemistry – University of Toledo

Certificate - Toxicology for Chemists - American Chemical Society

Certified Environmental Specialist (CES)

American Board of Forensic Examiners: Board Certified Forensic Examiner - Chemistry / Materials Sciences: Diplomate (# 3165) 1994 -

American College of Forensic Examiners: Fellow (#398)

American Institute of Chemists: Fellow 1984, Member 1961 -

American Institute of Chemical Engineers: Senior Member 2000 -

American Chemical Society: Member 1951 -

American Society of Safety Professionals (ASSP): Fellow 2000, Professional Member 1971 -

Royal Australian Chemical Institute: Fellow 2005

American Society of Testing Materials: Member 1989 -

National Fire Protection Association: Member 1989 -

American Industrial Hygiene Association: Member 2018 -

EDUCATION

MBA Degree: Aviation Safety, Finance - 1985

Embry Riddle Aeronautical University, Daytona Beach, FL

Post Graduate: Chemistry - 1955 (National Science Foundation Scholarship)

American University, Washington, DC

Chemical Engineering - 1956 Wayne University Detroit, MI

Radiation Safety – Aircraft Power Plants - 1963

University of California – Lawrence Radiation Laboratory. Berkeley, CA

(Dr. Albert Szent-Georgi, Supervisor)

BS Degree: Chemistry - 1950

Rollins College, Winter Park, FL

AWARDS/HONORS

American Society of Safety Engineers

- President's Award June 2000 (For meritorious service to the Society since 1971)
- President's Award June 2001 (For meritorious service as Chairman of the ASSE Foundation)
- President's Award June 2006 (For extraordinary service to the Safety, Health and Environmental profession in Florida and the nation)
- Safety Professional of the Year 1984, ASSE Gold Coast Chapter, West Palm Beach, FL
- Safety Professional of the Year 1985, ASSE Region VIII (Florida, Georgia, Puerto Rico)
- Safety Professional of the Year: Divisions 1991, National Award
- Safety Professional of the Year: Environmental Division 1995-96, National Award

Who's Who in the South and Southwest - 1994-95, 1997-98, 1999-2000; Who's Who in Science and Engineering - 1991-92, 1994-95, 1996-97, 2000-01, 2002-03, 2003-04, 2009, 2015-16: Marquis' *Who's Who in America Series*, 1st, 2nd, 3rd, 6th, 7th, 8th, 12th and 25th Editions

Board of County Commissioners - Palm Beach County, Florida: 1986: Commendation for safety engineering services to Palm Beach County, Florida

PROFESSIONAL ACTIVITIES

- Palm Beach Junior College: Faculty (Adjunct Instructor, Construction Safety Courses)
- Palm Beach County Safety Council: Past President, 1981-82

Past Chairman, Board of Directors, 1983

- American Chemical Society: Member Division of Chemical Health & Safety, Legislative Action Committee
- American National Standards Committees:

- 1) Z359.1 92 (Rev. '99) Safety Reqs. for Personal Fall Arrest Systems, Subsystems and Components Member representing the American Society of Safety Engineers
- 2) Z590 Criteria for Establishing Levels of Competence and Certification in the Safety Profession Member representing consultants
- 3) ANSI/ASSE Z690 Mold Standard User member / responder
- Editor Florida Section Journal American Chemical Society 1982, 1983
- American Society of Safety Engineers (ASSE):
 - o Professional Member 1971 -
 - o Past Section Chairman, Gold Coast Chapter, W. Palm Beach, FL 1978-1981
 - Past Chapter President, Gold Coast Chapter, W. Palm Beach, FL 1981-1982, 1983-1984
 - o Regional Vice President, Region VIII: 1984-1988, 1994-1997
 - o Regional Vice President, Region IV: 1997-1998, 1998-2000
 - o Vice President, Divisions: 1988-1990
 - o Member, National Board of Directors: 1984-1990, 1994-2000
 - o Founder / Charter Administrator, Environmental Division: 1990-1992
 - Faculty Member, National Continuing Education and Training Seminars for Safety Professionals (1991-1993) presented by the American Society of Safety Engineers nationwide
 - Trustee ASSE Foundation Elected by Board of Directors 1996 -
 - o Chairman ASSE ASSE Foundation Study Task Force
 - o Chairman American Society of Safety Engineers Foundation 1997-2002
 - o ASSE Legacy Trust Member Charter Committee 2005-2009
 - o Member various National Committees and Task Forces 1984 -
 - o Member National Governmental Affairs Committee 1995-2005
 - o Chairman Environmental Division Advisory Council
 - o Elected as *Fellow* of the Society June, 2000
- Toxic Substances Advisory Council Florida: Member, 1984 -88
 Appointed by the Governor of Florida (Member of Task Force that wrote the Florida Right to Know Statute)
- Emergency Response Commission Florida: Member, 1987-88
 Appointed by the Governor of Florida
- Local Emergency Planning Committee, Region 6 (Brevard, Lake, Orange, Osceola, Seminole & Volusia Counties): Chairman, 1991-92; Member, 1992-95 (Management of Emergency Response activities in a six county area)
- Editorial Advisory Board: Industrial Safety & Hygiene News, 1992-93
- State Customer Advisory Council: Member 1995. Division of Safety State of Florida.
 Appointed by Director, Division of Safety and Secretary, Florida Department of Labor and Employment Security
- U.S. Navy Training Center, Orlando, Florida, Restoration Advisory Board, Member (elected)
 1996 2001
- National Association of Demolition Contractors: Member 2002-2004

• American Welding Society: Member 2007-2009

PUBLICATIONS / PRESENTATIONS

American Society of Safety Engineers Region IV Professional Development Conference, Baton Rouge, LA, March 25 – 26, 2010 "Demolition Operations - Safety Considerations"

Business & Legal Reports (BLR) National Audio Conference, November 5, 2009 "Combustibles in the Work Place & How to Protect Your Workers & Your Work Place from these Hazards"

American Society of Safety Engineers National Professional Development Conference, San Antonio, TX, June 29, 2009 (Co-presenter with Adele Abrams, Esq.) "Prevention of Combustible Dust Explosions"

Business & Legal Reports (BLR) National Audio Conference, January 24, 2009 "Prevention of Chemical Spills"

Business & Legal Reports (BLR) National Audio Conference, June 25, 2008 "Combustible Dust – How to Protect Your Workers and Your Workplace"

Central Florida Chapter American Society of Safety Engineers, Orlando, FL, May 2008 "Update Florida Public Employees Safety Regulations Task Force"

Gold Coast Chapter American Society of Safety Engineers, West Palm Beach FL, May 2008 "Chemistry for the Non- Chemist"

American Society of Safety Engineers Region IV Professional Development Conference, Jacksonville, FL, March 2008 "Update on Florida Public Employees Safety Regulations Task Force Legislation"

United States Chemical Safety Investigation Board Hearing, Tallahassee, FL March 13, 2007 (Representing the American Society of Safety Engineers Members in Florida) Presentation regarding the need for a Florida Statute (Health & Safety regulations) that will cover municipal employees in Florida

Central Florida Chapter American Society of Safety Engineers, Orlando, FL, April 2006 "Toxic Mold: Fact or Fiction?"

Florida State Legislature Senate Committee on Business and Regulation, Tallahassee, FL, April 2006 (Representing American Society of Safety Engineers Members in the State of Florida)

Presentation regarding the need for a Florida Statute that covers mold assessment and mold remediation

American Society of Safety Engineers Regional Professional Development Conference, Atlanta, GA, April 200 "Ammonium Perchlorate Contamination in Municipal Water Supply Systems"

Central Florida Chapter American Society of Safety Engineers, Orlando, FL, October 2006 "Toxic Chemicals in the Workplace"

United States Chemical Safety Investigation Board Hearing: Daytona Beach, FL, December 2006 (Representing the National Headquarters of the American Society of Safety Engineers) "The Need for Safety & Health Regulations for Municipal Employees in the State of Florida"

American Society of Safety Engineers Regional Professional Development Conference, Birmingham, AL April 2005 "Dealing With Toxic Chemicals in the Work Place" and "Metal Aerosols – A Hazard Assessment – Overview"

Alabama Governor's Safety Conference, Orange Beach, AL, August 29-30, 2005 "Metal Aerosols – A Hazard Assessment Overview"

American Society of Safety Engineers Regional Professional Development Conference, Panama City Beach, FL April 2004, "Managing Mold"

American Society of Safety Engineers Regional Professional Development Conference, Panama City Beach, FL March 2003 "Advanced Environmental Management"

American Society of Safety Engineers National Professional Development Conference, Denver CO, June 2003 "Demolition Operations – Safety Hazards Considerations"

American Society of Safety Engineers Regional Professional Development Conference, Baton Rouge, LA, March 2002 "Demolition Operations – Safety Hazards Considerations"

Insurance Adjuster Groups, 2001 "Measurement of the COF Using Portable Testing Devices"

American Society of Safety Engineers Safety Technology Seminar Series, Orlando, FL, March 2001 "Bacteria Induced Oxygen Depletion in Confined Spaces"

American Society of Safety Engineers, National Seminars Program, Phoenix, AZ, January 2000 "Environmental Liability"

American Society of Safety Engineers, National Professional Development Conference Orlando, FL June 2000 "Environmental Issues Affecting the Profession"

American Society of Safety Engineers National Seminars Program, Scottsdale, AZ, November 2000 "Chemical Carcinogens, Fact or Fiction" and "Dealing with Toxic Chemicals in the Workplace"

K-Mart Corporation (Insurance Adjuster Group) 1997 "ASTM Standard F1637 – 95 Standard Practice for Safe Walking Surfaces"

American Society of Safety Engineers Chapters in Florida 1996 - 2000 "Slips, Falls & the Coefficient of Friction"

Nutrasweet Corporation, Deerfield, IL – Retained as Consultant & Floor Design Expert - 1991 "Floor Finish, Design & Installation" (Supervised redesign & repair of Headquarters Building entrance)

Martin Company Orlando Florida: Manufacturing Research Dept.

High Temperature Fuel Carburation in Internal Combustions Engines —Technical Report 1958

Martin Company Orlando Florida Manufacturing Research Dept.

Production of Filament Wound Ablative Nose Cones for Pershing Missiles – Technical Report 1958

Martin Company Orlando Florida Manufacturing Research Dept.

Advanced Design for Electrical / Electronic Receptor Harnesses for Ballistic Missiles Technical Report - 1958

Minute Maid Corp, Plymouth Florida Research Division

Recovery of Hesperidin from Grapefruit Peel- Technical Report 1954

Minute Maid Corp. Plymouth Florida Research Division

Development of Bakery Flavor Additives from Citrus Essential Oils- Technical Report 1953

Minute Maid Corp. Plymouth Florida Research Division

Development of Cattle Feed utilizing Citrus Molasses and Citrus Pulp - Technical Report 1953

Minute Maid Corp. Plymouth, Florida Research Division

Fractionation of Essential Oils from Citrus Peel – Technical Report 1952

May 11, 2020