



Causey Engineering
LLC

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Causey Engineering LLC

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Curriculum Vitae

EDGAR O. METCALF, BSEE



Mr. Metcalf is an Associate of Causey Engineering, LLC. Causey Engineering has for over 25 years been providing forensic and investigative engineering services and litigation support, specializing in industrial and construction engineering, operations, safety, patents, and regulations. Mr. Metcalf's initial engineering experience was the foundation for his lifelong career in all aspects of Health, Environment & Safety (HES) in several industries, culminating in the energy industry. He has particular experience in Systems Safety Analysis and safety management for oil and gas exploration, production, and refining.

Education:

Lamar University, Beaumont, Texas
BS, Electrical Engineering

DNV - Numerous courses in
Loss Control Program Development

Registrations:

Professional Engineer – State of Texas (till 2001)

Work Experience:

Causey Engineering LLC, Austin, TX 2005 to Present

Safety Consultant: Provides Safety Program analysis and investigative work related to the energy and utility industries. Mr. Metcalf took a sabbatical prior to this Consulting work.

Causey Engineering provides engineering analysis, governmental regulation investigation and research, accident reconstruction and litigation support primarily related to oil and gas, refineries, chemical and petrochem plants, central power stations, electronic manufacturing, food processing, pulp and paper, lumber manufacturing, industrial construction, and warehousing.

OCCIDENTAL OIL AND GAS CORPORATION 1981 to 1999

Worldwide Health, Environment and Safety Manager, Bakersfield, CA 1998-1999

- Corporate Chief of worldwide HES programs for operations in the U.S. and international operations.
- Managed the worldwide HES programs covering the HES Management System, Risk Engineering Programs and corporate assessments of the operations HES programs.
- Interfaced with senior corporate management and senior operations management in operations, domestic and international.

Manager, Program Development, Bakersfield, CA 1996-1998

- Developed and initiated implementation of the corporate Health, Environment and Safety Management System (HESMS) for worldwide operations.
- Developed and presented the rollout of the implementation planning for the HESMS in all domestic and international locations

Advisor to the Loss Control Management Standing Committee, Bakersfield, CA 1994-1996

- Under the direction of five senior corporate Vice Presidents, using the DNV International Safety Rating System as a base, developed, customized to the petroleum industry and initiated implementation of the Loss Control Management (LCM) Program for all international operations.
- Developed and presented implementation plans to management in 15 international locations.
- Defined and coordinated training programs for all operations' personnel and trained the Loss Control Coordinators at each operating location.
- Tracked and reported to the LCM Standing Committee the status of the program implementation. Prepared annual reports for the President.

Occidental de Colombia Safety and Environmental Manager, Bogotá, Colombia 1991-1994

- Managed the safety and environmental program for the corporations largest production operation. Ensured compliance with corporate policies and procedures and local laws and regulations for an operation producing 250,000 barrels of crude oil and up to 2 million barrels of produced water per day.
- Directed emergency planning and personnel training in response activities, development and implementation of safety systems, safe work procedures and incident investigation programs and appropriate internal inspections for compliance with laws/regulations.

Safety Manager International Operations, Tulsa, OK; Bakersfield, CA; Houston, TX 1981-1991

- In the newly formed Safety, Environment & Health department, established the position as Senior Safety Individual for worldwide operations.
- Developed the initial international safety programs for Occidental Oil and Gas, including safety policies and procedures, assessment program, and statistical reporting system.

Boeing Engineering & Construction Co., London, England 1978-1979

- *Consultant to Conoco*: Performed Safety evaluation of compliance with UK Statutory Requirements and corporate safety policies/procedures for an offshore platform during the design and fabrication.

Boeing Aerospace, 1961-1978

- *Systems Safety Supervisor*, Houston, TX 1976-1978. Supervised 17 safety engineers in the support of the NASA manned space program.
- *Systems Reliability Supervisor*, Houston, TX 1974-1976. Supervised 17 reliability engineers in the support of the NASA manned space program.
- *Design Engineer A*, Houston, TX 1967-1974. At the NASA Manned Spacecraft Center, performed safety analyses on Apollo Lunar orbital and Lunar surface experiments.
- *Design Engineer*, Seattle, WA 1961-1967. Minuteman Systems Engineering, Launch Control System Test Program

Use of this CV is prohibited until we have a mutually signed agreement concerning your engagement of Causey Engineering LLC. Pending such, the use of our name is also prohibited, and we reserve the right to accept assignment by others in lieu of your firm.