

# JEFFERY A. HADLEY, P.E., CFEI, BSCE, MS Engineering

President/Senior Principal Engineer

## PROFESSIONAL SUMMARY

Licensed Professional Engineer with over twenty-five years of domestic and international experience in civil, mechanical, industrial and systems engineering. Nationally Certified in Fire and Explosions Investigator, having lead joint investigations of cause and origin determinations in various states. Holds a Masters of Science in Engineering degree focused in mechanical and industrial engineering, with a minor in Business Administration. Undergraduate education was in civil engineering, with a focus on structural and geotechnical engineering. Professional experience has included mechanical, electrical, structural, geotechnical, fire science, material sciences, quality analysis/control and process/production optimization related design and operational issues. Has extensive experience with FDA and local, state and federal regulatory agency coordination and code regulation compliance. Frequently called on to analyze production, process and system failures and resolutions involving food, beverage, and material handing equipment, commercial/residential investigations and civil/structural/construction engineering projects. Project engineering and management of various "Greenfield" Plants, processing lines/systems and expansion projects throughout North America and Europe. International management of technical, operational and business resources.

# **SPECIAL QUALIFICATIONS**

- Multi-state licensed Professional Engineer, with over 25 years of experience.
- > Graduate and undergraduate engineering degrees focused on Civil, Mechanical, Industrial and Systems Engineering, Mathematics and Business.
- International systems and equipment commissioning and failure analysis/troubleshooting.
- > Commercial and Production Equipment development, design and prototyping.
- Construction, Foundations and Structural designs and analysis.
- Water/Moisture Intrusion & Mold Causations.
- > Fire Cause & Origin determination.
- > Electrical and Systems Controls development, design and troubleshooting.
- Product and materials defect analysis.
- > Patent infringement technical evaluations for both US and International Patents.
- Failure Mode Engineering Analysis (FMEA).
- Advance Computer Analysis, Design and 3-D Modeling.
- Finite-Element-Modeling of design performance and failure analysis.
- Project Management of "Greenfield" projects and equipment/process/production development.
- Establishment, implementation and maintaining of various quality and analysis programs, including Statistical Process Control, ISO 9000, Six Sigma and 5S.
- > FDA and Federal Government regulatory compliance/standards.
- Environmental Impact Plans and governmental approvals.

www.hadleyfea.com Office: 919.879.9014

Curriculum Vitae of Jeffery A. Hadley PE, CFEI Senior Principal Engineer Hadley Forensic Engineering Associates, PLLC September, 2010

# PROFESSIONAL EXPERIENCE

Present: HADLEY FORENSIC ENGINEERING ASSOCIATES, PLLC

Clayton, North Carolina

President/Senior Principal Engineer

Owner and President of company (HFEA). Serves as the firm's senior principal engineer. Provides technical analysis, fire cause and origin determination, product defect analysis, evaluation of design suitability and failure determination of structures, machine operations and engineered systems. Also, investigation of system failures, determination of restorations of commercial and residential systems/facilities.

# 2007 – 2010 FORENSIC ANALYSIS & ENGINEERING CORPORATION Raleigh, North Carolina VP of Engineering & Technology

Principal in charge of company's (FAEC) engineering operations, including the Company's multiple branch locations for providing professional engineering services, client contract fulfillments, and daily technical activities. Served as the firm's senior principal technology engineer in the performance of forensic engineering investigations and causation determinations.

# 2006 – 2007 TURKINGTON APV USA Goldsboro, North Carolina VP of Engineering

Senior Engineer in charge of the company's engineering and technical activities. This included design and development of market leading baking systems and equipment, including safety and fire alarming/controlling systems. Conducted Failure Mode Engineering Analysis (FMEA) on projects and equipment developments. Traveled domestically and internationally extensively while being responsible for start-up and commissioning of all production equipment within the plant.

# 2004 -2006 AIDCO INTERNATIONAL Adrian, Michigan VP of Engineering & Technology

Engineer in charge of the company's engineering and technical activities. This included design and development of fully automated and robotic material handling systems. Development of state-of-the-art end of arm tooling. Performed and directed mechanical system failure analysis. Conducted Six Sigma and 5S analysis relating to improvements for internal and external operational processes and to minimize manufactured product reject percentages.

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#### 1999 – 2004 ELOPAK, INC.

# New Hudson, Michigan <u>Executive Director of Research & Engineering</u>

Managed all of the company's engineering and technical activities. This included design and development of industry leading filling and packaging systems. Analysis and resolution of previously sold and installed systems, both domestic and international. Responsible for establishing, implementing and maintaining of ISO 9000 engineering and design practices. Also, responsible for all FDA and regulatory compliances.

#### 1993 - 1999 SIG-COMBIBLOC, INC.

Columbus, Ohio
Director of Operations & Engineering

Managed all of the company's domestic operations and engineering activities. This included design and development of industry leading aseptic filling and packaging systems. Analysis and advancement of high speed production lines. Quality and materials analysis of packaging products. Served as company's representative for the National Food Processors Association (NFPA), including chairperson the New Technology and Packaging committees.

#### **1988 – 1993 FMC CORPORATION**

Chicago, Illinois

#### **Director of Engineering & Business Development/Technical Manager**

Managed all of the food processing equipment division's engineering and technical activities. This included design and development of industry leading food equipment and systems, ranging from harvesters through various food and beverage processing lines and systems. Advance computer modeling of equipment and product performance/interface. Also, managed domestic and international business group.

# **1982 – 1988 Ball Corporation**

Muncie, Indiana

#### Manager Corporate Engineering Design & Staff/Project Engineer

Managed the corporate analysis, design and development activities. Also, responsible for the technical computer systems utilized throughout the company. Project managed "Greenfield" projects in various states, including plastic packaging and product plants, aerospace expansions and R&D facility. Developing and prototyping of proprietary equipment and systems.

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## 1979 – 1981 A-TECH Corporation Indianapolis, Indiana Branch Manager & Senior Technician

Manage the company's Freeport, Texas branch. Established, implemented and maintained quality control programs for construction of new power plants in Garden City, Kansas and Muscatine, Iowa. Performed lab and field testing and analysis of materials in support of various civil and geotechnical projects.

## **EDUCATION**

- MS in Engineering, Interdisciplinary Engineering, with Business Minor, Purdue University, 1989
- BSCE, with Honors, Tri-State University, 1982

#### CONTINUING EDUCATION

- National Fire, Arson and Explosion Investigation Training Program NAFI, Denver, CO, 2008
- Computer Fire Modeling NAFI, Denver, CO, 2008
- The Inside Story: "A Guide to Indoor Air Quality" Online, 2008
- Slip and Fall Course William English, Philadelphia, PA 2008
- o OSHA Stairways and Ladders Online, 2008
- Ice Forces on Structures Online, 2008
- Causes of Distress and Deterioration of Concrete—Online, 2008
- o Guidelines for the Evaluation and Repair of Residential Foundations Online, 2008
- Mechanical Properties of Wood
   – Online, 2008
- o Physical Properties and Moisture Relations of Wood Online, 2008
- Test Instruments & Measuring Devices Online, 2008
- Excavations Online, 2009
- Guide to Thermal Stress & Brittle Fractures Online, 2009
- Soil Stabilization for Pavements Online, 2009
- o Guide to Lead Exposure in the Construction Industry Online, 2009
- Excavations Online, 2009
- Explosions Safety Standards Online, 2009
- Combustion Dust in Industry Online, 2009

# **LICENSE & CERTIFICATIONS**

- Registered Professional Engineer, Alabama, Connecticut, Delaware, Florida,
   Georgia, Indiana, Kentucky, Louisiana, Maryland, Mississippi, New Hampshire, New York, North Carolina, Ohio, Pennsylvania, South Carolina, Tennessee, and Virginia
- Certified Fire and Explosion Inspector
- Certified Equipment Design, American Institute of Baking (AIB) International