Principal

Mr. Robert Kenney is a Principal for Engineering Systems Inc. (ESi). Projects ranging from simple failure investigations to complex engineering studies are undertaken.

Mr. Kenney specializes in complex failure investigations of structures and building systems, soils and related structural settlement, hydrology, hydraulics and pipeline systems, and product performance. He has over thirty-five years of experience in diverse structural and manufacturing failure investigations, identifying the cause and improper design, fabrication, or construction associated with flood, fire, lightning, explosion, earthquake, wind, soil erosion, drainage and sediment control, and moisture intrusion damage. His experience includes premise liability and cases related to employees being injured or fatally wounded at industrial and commercial facilities operating machinery and heavy construction equipment like bulldozers and excavators.

Mr. Kenney has investigated failures or damage to industrial, commercial, and residential systems and structures. This includes multi-story EIFS buildings and operations, mining operations, large roofs, parking decks, tall retaining walls and billboards, railroad tunnels and grade-crossings, gores, bifurcation and super elevation issues, roadway paving (both flexible and rigid), subgrade analysis, construction defects and bridges, standard of care and maintenance of manhole and meter covers and safety codes associated with covers, and other materials and components like crash barriers, guard rails and noise barriers. He has served as an inspector for compliance to DOT plans and specifications and has opined on the application of MUTCD in both arbitration and trial. He has also investigated multiple earthen and Roller Compacted Concrete dam failures including discharge pipe and emergency spillway washouts.

He has investigated or tested large industrial equipment failures like cranes and other lifting equipment for proper operation. He has investigated industrial process systems, including production equipment, piping, valving, oven and other heating equipment venting, and closed vapor collection systems. He has investigated pre-stressed and precast concrete beams, standing seam roofs, handrails, windows, curtain walls and storefronts, doors, egress doors, both sliding and revolving, including solid and sectioned rollup doors and cladding, escalators and elevators, including mechanical operation, controls, and pit construction. He has performed multiple evaluations of construction material installations, soil-pipe interaction, pipe coupling, and weld joint integrity.



Robert N. Kenney Principal

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ESi GA - Atlanta 430 Technology Parkway NW Peachtree Corners, GA 30092

#### Education

Florida State University, MS, 1971 Georgia Institute of Technology, BSCE, 1969

#### Areas of Specialization

Structures and Construction Defects **Failure Analysis Building Envelop Moisture Intrusion** Analysis Premises and Professional Liability Hydrology and Flooding Analysis Hydraulic and Pipeline Design and **Failure Analysis** Roadways and Soil Mechanics and Settlement Analysis Product and Operational System Safety and Failure Analysis Wind and Water Damage Investigations **Construction Costs and Techniques** and Methods Analysis Fuel Gas Systems Operation and Protection



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Mr. Kenney has been involved in multiple OSHA work site claims involving injuries and death due to construction and manufacturing equipment usage, including machine guarding, and fires and explosions as a result of chemical processes and hazardous materials release. He has analyzed watershed hydrological and hydraulic pipe failures including fire sprinkler systems and pumps per NFPA 13 and performed multiple NFPA 25 sprinkler system and other code inspections. He has also investigated soil erosion, settlement and collapses, industrial accidents, and mechanical system failures, including improper manufacturing, construction, and code violations, including slip/trip/fall situations.

Mr. Kenney has investigated industrial processes and pipeline systems for reliability, durability, maintainability, risk assessment, and operational practices. He has analyzed natural gas (NG) distribution systems for proper operations. He has developed multiple cost estimates for repair, replacement, relocation, and restoration of most utilities including gas, liquid, electrical, telecommunications, and low voltage underground utilities. Mr. Kenney has testified by deposition and/or at trial in federal, state, and superior courts.

# **Licenses & Certifications**

- State of Alabama P.E. License No. (32196-E)
- State of Arkansas P.E. License No. (15099)
- State of Colorado P.E. License No. (46682)
- State of Florida P.E. License No. (27493)
- State of Georgia P.E. License No. (10731)
- State of Illinois P.E. License No. (062-042509)
- State of Kentucky P.E. License No. (28764)
- State of Louisiana P.E. License No. (18198)
- State of Maryland P.E. License No. (52456)
- State of Michigan P.E. License No. (6201059876)
- State of Mississippi P.E. License No. (20680)
- State of Missouri P.E. License No. (201202424)
- State of Nebraska P.E. License No. (E-19370)
- State of New York P.E. License No. (091247)
- State of North Carolina P.E. License No. (039376)
- State of Ohio P.E. License No. (79534)
- State of Oklahoma P.E. License No. (32681)
- State of Pennsylvania P.E. License No. (080105)
- State of South Carolina P.E. License No. (29761)
- State of Tennessee P.E. License No. (115723)
- State of Texas P.E. License No. (112009)
- NCEES Record (47437)
- Diplomat American Academy of Environmental Engineers (83-10028)
- Level II Certified Design Professional for Soil & Water Erosion Control (40303)



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# **Positions Held**

# Engineering Systems Inc., Peachtree Corners, Georgia

2009 – Present

### Kimley-Horn & Associates, Norcross, Georgia

• 2005 – 2009

### GDS & Associates, Marietta, Georgia

• 2004 – 2005

### Cerny & Ivey Engineers, Inc., Norcross, Georgia

• 2001 – 2004

# Avery Dennison Corporation, Inc., Doraville, Georgia

• 1995 – 2001

### Jordan, Jones and Goulding, Inc., Atlanta, Georgia

• 1986 – 1995

### Norfolk Southern Corporation, Inc., Atlanta, Georgia

• 1976 – 1986

### Action Construction, Inc., Stone Mountain, Georgia

• 1972 – 1975

# **Publications**

### Fall Protection for Buildings: Usage, Responsibilities, and Risk

Kenney R., Abubakar N., North Carolina Association of Defense Attorneys featured article, published April 27, 2018.

### So What Codes Apply Here?

Bob Kenney, Georgia Defense Lawyers Association (GDLA) magazine, Volume XI, Issue III, Winter 2014, pages 7-9. Presented at the GDLA Annual Meeting, Florida.

### Avoiding Accidents and OSHA Citations by Knowing Your Combustible Dust Hazards

Hanks, M.L., Kenney, R.N., Powder and Bulk Engineering magazine, December 2012, pages 41-45.

### Find Out Who Really Runs the Show

Kenney, R.N., MacLean, R., Environmental Magazine, March 2001, pages 6 – 8. Presented at the National Association of Environmental Managers (NAEM) Conference.

### Manual of Operations FD-3

Water Environment Federation, contributing author, 1994, ISBN 1-881369-89-7.



# **Presentations**

# Fall Protection for Buildings: Usage, Responsibilities and Risk

Kenney, R.N., Presented at the North Carolina Association of Defense Attorneys (NCADA) 2018 Winter Workshop, Durham, NC, February 2018.

# First-Party Claims: The Rise (And Fall) of Tailings Dams

Kenney, R.N., Presented at the Loss Executives Association (LEA) 86th Anniversary Meeting, Newport, RI, June 2017.

### **Requirements for Handrails**

Kenney, R.N., Presented at the PLRB Large Loss Conference, 2012.

### **Building Codes Relating to Construction Defects**

Kenney, R.N., Presented at the Southern Loss Association (SLA) Annual Property Seminar, August 2011.

### Greenhouse Gas Registry: What is it?

Kenney, R.N., Presented at the National Association of Environmental Managers (NAEM) Conference, Mobile, AL, June 2008.

# **Continuing Education**

- Air and Waste Management Hazardous Waste, Title V and HAPs training 1 week
- American Association of State Highway and Transportation Officials (AASHTO), Design of Pavement Structures
- American Board of Industrial Hygiene, Mold Removal Protocol
- American Concrete Institute, Concrete Joints in Slabs, Pavements and Flatwork
- American Concrete Institute, Flat Slab and Vertical Wall Crack Investigation
- American Concrete Institute, Precast and Prestressed Concrete Elements
- American Concrete Institute, Rehabilitation of Concrete Structures
- American Industrial Hygiene Association, Detection Methods for Employee Exposure
- American Industrial Hygiene Association, Mold Evaluation and Identification
- American Public Works Association, Texas Chapter, Geotechnical Considerations for Slope Stability, Ditches, Embankments and Detention Ponds
- American Society of Civil Engineers, Design and Renovation of Wood Structures
- American Society of Civil Engineers, Design, Construction, and Renovation of Masonry Structures
- American Society of Civil Engineers, Design of Cold Formed Steel Structures
- American Society of Civil Engineers, Earth Retaining Structures, Selection, Design, Construction and Inspection
- American Society of Civil Engineers, Storm Water Monitoring and Compliance
- American Society of Civil Engineers, Structural Condition Assessment



- American Society of Civil Engineers, Structural Design of Residential Buildings
- American Society of Civil Engineers, Structural Renovation of Buildings
- American Society of Civil Engineers, Underground Tank Installation and Removal
- American Society of Civil Engineers, Wind loads for Buildings
- American Society of Heating, Refrigeration and Air-Conditioning Engineers Basic HVAC Sizing for Cooling and Heating Load Calculations
- American Society of Testing and Materials, Concrete Crack Causes and Cures
- American Society of Mechanical Engineers, Product Safety and Risk in Life Cycle Analysis
- American Society of Mechanical Engineers, Risk Assessment and Analysis of Human Error in Industrial Operations Environment
- Building Science Institute, Building Systems Evaluation
- Concrete Reinforcing Steel Institute, Reinforcing Placement
- Concrete Specification Institute, Tilt-up Wall Requirements
- GeoTech Engineering and Testing, Evaluation of Foundation Distress and Causation for Distress of Building Structures
- English Slip Resistance Measurement Device training
- Georgia Water Professionals Association (GWPA), Design and Construction of Stormwater Controls
- Georgia Water Professionals Association (GWPA), Erosion and Sediment Control Plan Design Certification Course
- ICC ADA Standards for Accessible Design
- ICC Mechanical and Physical Properties and Structural Design of Wood
- Infrared Tomography, Building Envelope Institute
- Mine Safety & Health Admin "Mine Academy" Mine Construction, Management and Repair
- Mycometer Surface Fungi, Sampling & Analysis Proficiency Training Program
- National Association of Corrosion Engineers, Cathodic Protection Interference Short Course
- National Concrete Masonry Association, Structural Masonry Installation
- National Corrugated Steel Pipe Association, Storm Water Detention Design
- National Fire Protection Association (NFPA), Safe Practices for Hazardous Dust Processes
- National Fire Protection Association (NFPA), Sprinkler Systems Hydraulic Design
- National Roofing Contractors Association, Roof Installation and Repair
- National Safety Council, Accident Investigation and Root Cause Analysis
- OSHA, Safety Hoisting and Crane and Other Lifting Equipment
- OSHA, Toxic Substances Control Act (TSCA), Personal Protection Equipment, Accident Prevention, General Compliance and Process Safety, Fire/Explosion, Lock Out/Tag Out, Material Safety Data, Confined Space, Toxic Material Handling, Machine Guarding,
- Ventilation Training. Several courses ranging from 1 day to 1 week
- Portland Cement Association, Design of Stucco, EIFS and Other Cementitious Finishes
- Portland Cement Association, Cement-lime Plaster Installation
- Powder and Bulk Engineering Dust & Gas/Liquid Flow Fundamentals & Control of Explosion Hazards



- PPI Structural Engineering Review Course, Vertical and Lateral Forces
- IIBEC, Building Moisture Intrusion Evaluation
- Six Sigma Institute, Six Sigma Training 6 weeks
- Southern Pine Wood Products Council, Commercial Wood Building Design
- US EPA Hazardous Waste Handling and Disposal, CWA, CAA, RCRA, CERCLA, TRI, EPCRA, SWPPP, SPCC and SARA Training. Several courses ranging from 1 day to 1 week.
- University of Maryland, Fire Protection Engineering, Fire Assessment Methods
- University of Wisconsin-Madison, Commissioning Authority+Building Enclosure Knowledge Requirements Certification (CxA+BE)
- University of Wisconsin-Madison, Water Entry Prevention and Moisture Control in Buildings, Roofing, Exterior Wall Systems

### **Professional Affiliations/Honors**

### American Institute of Steel Construction (AISC)

• Member

# American Society of Civil Engineers (ASCE)

Life Member

#### American Water Works Association (AWWA)

• Member

### Georgia Society of Professional Engineers (GSPE)

Member

### Georgia Water Professionals Association (GWPA)

• Life Member

#### International Institute of Building Enclosure Consultants (IIBEC)

Committee Chair

### Water Environment Federation (WEF)

- Member
- Previously President of Georgia Water Environment Federation (GWEF)