



Curriculum Vitae

Scott A. Sollars, P.E., CGE, IAAI-CFI
Senior Mechanical Engineer and
Corporate Safety Officer

Professional Practice

Licensed professional engineer with consulting, project management and forensic experience. Extensive background in mechanical systems, machine design analysis, safety and hazard evaluation, machine guarding, combustion mechanics, and fuel gas systems and components. Trained in asbestos abatement and hazardous material general site work. Expertise with automated testing techniques and data acquisition in an engineering environment. Provides litigation support and expert testimony for clients as needed.

Employment History

Principal/Mechanical Engineer and Corporate Safety Officer – Crane Engineering

Plymouth, MN • 1996 - Present

Performs analyses of mechanical systems and design, mechanical and material failure, explosions and fires. Consults on fuel gas equipment and controls. Special work interests include hazards analysis, system safety evaluation and process equipment.

Project Engineer – Federal Cartridge Company

Arden Hills, MN • 1993 - 1995

Responsible for project design and management. As representative of FCC, worked directly with owner – U.S. Department of Army – and its engineers to develop preliminary project specifications, investigate project feasibility, prepare proposals and cost estimates and allocate project resources. Projects included design and modification of HVAC systems; implementing natural gas system design, construction and modification; asbestos abatement; above and underground fuel storage tank disposal; and implementation of chlorofluorocarbon monitoring and disposal program.

Professional Licenses

Registered Professional Engineer – Minnesota, 2000

Certified Gas Engineer, 2011

IAAI Certified Fire Investigator (IAAI-CFI), 2015

Professional Affiliations and Honors

American Society of Heating, Refrigerating and Air Conditioning Engineers, 1992 to present.

American Society of Mechanical Engineers, 1997 to present.

Minnesota Chapter of the International Association of Arson Investigators, 1997 to present.

National Fire Protection Association, 1998 to present.

Governor's Technical Advisory Group on Statewide Building Code Adoption, 1999.

National Society of Professional Engineers, 2000 to present.

Minnesota Society of Professional Engineers, 2000 to present.

American Society of Gas Engineers, 2003 to present.

American Society of Plumbing Engineers, 2005 to present.

American Society of Testing and Materials, 2006 to present.

Minnesota Association of Plumbing and Mechanical Officials, 2012 to present.

Education

Bachelor of Mechanical Engineering, University of Minnesota, Minneapolis, MN, 1991.

Continuing Studies

Basic Electricity, The International Association of Arson Investigators, Inc., 2015.

Electrical Safety, The International Association of Arson Investigators, Inc., 2015.

Documenting the Event, The International Association of Arson Investigators, Inc., 2015.

Digital Photography and the Fire Investigator, The International Association of Arson Investigators, Inc., 2015.

Vacant and Abandoned Buildings: Hazards and Solutions, The International Association of Arson Investigators, Inc., 2015.

A Ventilation-Focused Approach to the Impact of Building Structures and Systems on Fire Development, The International Association of Arson Investigators, Inc., 2015.



Understanding Fire Through the Candle Experiments, The International Association of Arson Investigators, Inc., 2015.

Arc Mapping Basics, The International Association of Arson Investigators, Inc., 2015.

Introduction to Fire Dynamics and Modeling, The International Association of Arson Investigators, Inc., 2015.

Explosion Dynamics, The International Association of Arson Investigators, Inc., 2015.

Residential Electrical Systems, The International Association of Arson Investigators, Inc., 2015.

Wildland Fires Investigation, The International Association of Arson Investigators, Inc., 2015.

Evidence Examination: What Happens at the Lab? The International Association of Arson Investigators, Inc., 2015.

Fundamentals of Residential Building Construction, The International Association of Arson Investigators, Inc., 2015.

Fire Investigator Scene Safety, The International Association of Arson Investigators, Inc., 2015.

Preparation for the Marine Fire Scene, The International Association of Arson Investigators, Inc., 2015.

Fire Protection Systems, The International Association of Arson Investigators, Inc., 2015.

An Analysis of The Station Nightclub Fire, The International Association of Arson Investigators, Inc., 2015.

Charleston Sofa Super Store Fire, The International Association of Arson Investigators, Inc., 2015.

Insurance and the Fire Investigation, The International Association of Arson Investigators, Inc., 2015.

Introduction to Evidence, The International Association of Arson Investigators, Inc., 2015.

Investigating Motor Vehicle Fires, The International Association of Arson Investigators, Inc., 2015.

Postflashover Fires, The International Association of Arson Investigators, Inc., 2015.

The Potential Value of Electronic Evidence in Fire Investigations, The International Association of Arson Investigators, Inc., 2015.

Fundamentals of Interviewing, The International Association of Arson Investigators, Inc., 2015.

Fire Dynamics Calculations – Version 2.0, The International Association of Arson Investigators, Inc., 2015.

Critical Thinking Solves Cases, The International Association of Arson Investigators, Inc., 2015.

Managing Complex Fire Scene Investigations, The International Association of Arson Investigators, Inc., 2015.

Understanding and Preventing Explosions, The American Institute of Chemical Engineers, Philadelphia, PA, 2001.

Educational Conference, Minnesota Office of Pipeline Safety, Brainerd, MN, 2001.



Seminar, The International Association of Arson Investigators, St. Cloud, MN, 2001.

Seminar, The International Association of Arson Investigators, St. Cloud, MN, 2000.

Vehicle Fires and Investigation Course, Anoka-Hennepin Technical College, 1999.

Machinery and Machine Guarding Standards Course (OSHA 204A), 1998.

Gas Piping System Design, Installation and Testing, Minnesota Propane Gas Association, St. Cloud, MN, 1997.

Seminar, International Association of Arson Investigators, Bloomington, MN, 1996.

Hazardous Material General Site Worker Course and Certification per 29 CFR 1910.120., 1994 to present.

Presentations and Publications

Contributing editor, seventh edition of the National Fuel Gas Code Handbook (2009).

“Fires and Explosions Caused by Household Appliances”, guest lecturer, North Hennepin Technical College, Hopkins, MN, 2004.

“Fighting Propane Fires” presentation, Plymouth Fire Department, Plymouth, MN, 2000.

“Fires and Explosions Caused by Household Appliances”, guest lecturer, North Hennepin Technical College, Hopkins, MN, 1997.

“Propane Basics” presentation, MFA Oil Seminar, Columbia, MO, June 1997.

“Fighting Propane Fires” presentation, Maple Grove Fire Department, Maple Grove, MN, 1996.

