



Bridges Unlimited LLC
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CAROL E. LYONS

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SPECIALTIES

- Practical engineering analysis and problem solving
- Air pollution prevention, reduction, control, and compliance
- Cost effective compliance with environmental regulations and pollution reduction
- Regulatory analysis and environmental permitting
- Interdisciplinary program management / design, implementation, completion
- Industry / government / community communication

ENVIRONMENTAL ENGINEERING; REGULATORY COMPLIANCE

POLLUTION CONTROL, REDUCTION AND PREVENTION AND MANAGEMENT

- Environmental and engineering consulting firm specializing in diverse areas, including air quality, environmental policy and analysis, pollution prevention, and engineering.
- Clean Air Act Title V permits, compliance, industrial audits, emissions inventories.
- Dedicated to effective, efficient, user-friendly regulatory compliance and record keeping strategies for industrial facilities, specializing in unique custom operations.
- Managed residential wood smoke pollution reduction project in Lincoln County, Montana which resulted in dramatic decreases in particulate air pollution.
- Facilitated innovative engineering analyses as process engineer for Amoco Production Company for oil and gas exploration and production in the western United States.
- Designed, implemented environmental compliance programs while engineering improved manufacturing and production.
- Experienced and hard-working with successful government and business experience in solving pollution problems through collaboration and sound science.

TECHNICAL, ENVIRONMENTAL, AND POLICY PROGRAM MANAGEMENT

- Managed the landmark urban air pollution study, the 1987-88 Metro Denver Brown Cloud Study, achieving scientific answers for visibility problems in Denver; responsible for the success of the \$1.5 million, 14-month private sector / public-sponsored study.
- Developed and implemented long-term successful comprehensive corporate environmental training, environmental management systems, and internal audit programs.

- Administered air pollution monitoring, modeling, analysis, and control; directed corporate air quality discipline; coordinating work of 50 staff members in 15 offices.
- Designed and implemented the Small Business Stationary Source Air Pollution Technical Compliance Assistance program for Pennsylvania, serving 30,000 regulated businesses.
- Task-oriented leadership achieving goals through flexible problem solving, stakeholder participation, active listening and thorough technical work.

PROBLEM SOLVING AND COMMUNICATION

- Created environmental training programs including industrial training for operating engineers, compliance briefings for corporate management and government executives
- Implement customer service oriented environmental compliance programs
- Chaired 3 advisory committees of the Brown Cloud Study; technical, socio-economic, and peer review, with all scientific, government, industry, and community stakeholders.
- Rebuilt deteriorating oil company relations with federal, state, and local environmental agencies, designing effective government partnerships and educating company personnel.
- Overseas experience in environmental management and training; adept at communication in multiple languages and cultures, including high technology and computers.

EXPERIENCE

- Bridges Unlimited LLC, President, Engineering and Environmental Consulting, Denver, Colorado, 1986 to 1990; 1994 to present
- Institute for Environmental Solutions, Executive Director; independent non-profit organization committed to science based, technically sound solutions to complex environmental and natural resource problems, Denver, 2002 – present
- Visiting Lecturer, Urban and Regional Planning, University of Colorado, 1989 – present
- Adjunct Professor, Environmental Policy & Management, University of Denver, 1989-96
- Manager, Environmental Pollution Control and Prevention Research, National Renewable Energy Laboratory, Golden, Colorado, 1994 to 1996
- Manager, Air Quality, PRC Environmental Management, Inc., Denver, CO, 1990 to 1994
- Project Manager, 1987-88 Metro Denver Brown Cloud Study, 1987 to 1988
- Environmental Coordinator; Process Engineer, Amoco Production Company, Denver, Colorado and Liberal, Kansas, 1980 to 1986

EDUCATION

M.S. Chemical Engineering, California Institute of Technology, Pasadena, CA, 1976
 Graduate Organic Chemistry, École Nationale Supérieure de Chimie de Montpellier, 1973 to 1974
 B.S. Physics/Chemistry, Université des Sciences et Techniques, Montpellier, 1973 (with honors)
 Plume Evaluation Training (Opacity Certification, “Smoke Reader”), ODEQ, 2002
 40-hour OSHA Hazardous Waste training, 1991
 ISO 14000 Continuing Education Program, A&WMA, June 1997
 Numerous short courses, university classes, technical and business seminars, 1978 to present
 French: Fluent speaking, reading, and writing. Some Spanish, Mandarin Chinese, Tagalog.

PROFESSIONAL AFFILIATIONS

Qualified Environmental Professional (QEP), 1994-2007.
 Air & Waste Management Association (author, session chair), member, 1979 to 2005

- Fellow Member 2000
- Ethics Committee (vice-chair)

American Institute of Chemical Engineers (journal author), Life Member, 1974 to present

American Chemical Society (section speaker), member, 1989 to present
Colorado Hazardous Waste Management Society, Board of Directors, 1997 to 1999; member
Society of Women Engineers, Senior Life Member, 1979 to present; life member 2003
Colorado Environmental Business Alliance, member
1996-98 Northern Front Range Air Quality Study (CSU); Design Team, QCC member

VOLUNTEER AFFILIATIONS

Denver Kids, Inc., Volunteer Mentor, 2006 to present
Big Sisters of Colorado, Big Sister, 1994 to 2006 (Big Sister of the Year, 2002)
Roxborough State Park, Volunteer Naturalist, 1993 to present
Rocky Flats Cold War Museum, Inc., 1998 – present, Founder; President of the Board of Directors, 1998 - 2001
Thorne Ecological Institute, Board of Trustees, 1990 to 1994
Volunteer Oil Industry Communication, Amoco Production Co. Achievement Award, 1986
Denver Downtowners Toastmasters (Distinguished Toastmaster of the Year, 1985)
Moss Hart Memorial Award for Plays of the Free World, New England Theatre Conf., 1968