

RESUME – E. SUSAN ROTHAAAN

EMPLOYMENT HISTORY:

- Founder and Executive Director, A Nurtured World, Inc., 1997- Present
- Senior Technical Specialist, Texas Commission on Environmental Quality, 2002-2004
- Team Leader/Engineer, Texas Commission on Environmental Quality, 1994-2002
- Staff Engineer/Chemist, Radian Corporation, 1985-1994

EDUCATION

- Masters in Chemical Engineering, University of Texas at Austin, 1993.
- Bachelors in Chemistry, Lewis and Clark College, 1984.

CERTIFICATIONS, AWARDS, AND AFFILIATIONS

- ISO 14001 Lead Auditor, 2005
- Member of the Environmental Management System (EMS) Council for the ANSI-AQS Accreditation Board (ANAB), 2005
- White House Closing the Circle Award for “Greening the Government,” 1998.
- Vice President Al Gore’s Hammer Award for Reinventing Government, 1998.

EXPERIENCE GAINED

A Nurtured World, Inc.

- Developed and delivered the highly successful consumer-pollution prevention training in many venues including the University of Texas at Austin, the Texas Army National Guard – Camp Mabry, Advanced Micro Devices, City of Dallas, and the Lower Colorado River Authority.
- Directed development of a prototype On-Line tool for measuring personal pollution prevention under an EPA grant-funded program.
- Managed numerous EPA grant-funded efforts to bring consumer conservation into organizations and communities.
- Developed training courses to integrate consumer conservation with an organization’s Environmental Management System implementation.

Texas Commission on Environmental Quality, Senior Technical Specialist

- Developed and managed the Texas Environmental Management System (EMS) program, an incentive-based program designed to reward top-performing organizations.
- Developed and established EMS audit protocols, guidance for third-party auditors, and

trained staff in implementing performance-based audits.

- Developed and implemented the first state-EPA work plan to integrate the Texas EMS program and EPA's National Environmental Performance Track program.
- Served as a liaison for rules and legislative programs to promote pollution prevention.
- Conducted EMS audits, provided technical assistance, and provided training to all types of organizations in development of performance-based EMSs.

Texas Commission on Environmental Quality, Team Leader/Engineer

- Managed pollution prevention (P2) programs including the state P2 planning requirements, the state-wide material exchange program, a pollution control tax-exemption program, P2 site assistance visits for industry and organizations, and P2 software development.
- Delivered workshops and presentations to over 3,000 individuals throughout Texas and Mexico.
- Conducted hundreds of on-site pollution prevention technical visits for a range of facilities including military installations, chemical plants, metal finishers, autobody shops, state agencies, and computer chip manufacturers.
- Developed a nationally recognized partnership with the Department of Defense involving over 25 agencies resulting in over \$2 million in savings through improved environmental performance.
- Directed development of a Web-based reporting system that eliminated the need to manually enter hundreds of reports
- Developed new accounting methods to standardize pollution control tax exemptions and streamlined the tax exemption program to ensure more consistency.
- Developed and implemented numerous innovative efforts including incorporation of the Natural Step protocol into P2 site assistance visits, development of culture-change methods to help organizations establish a P2 culture, and development of environmental cost-accounting methods to fully account for hidden environmental costs.

Radian Corporation, Staff Engineer/Chemist

- Directed and participated in projects to improve wet and dry Flue Gas Desulfurization processes including bench and full-scale testing, field studies, laboratory analysis, and research.
- Assisted with developing of environmental air permits and regulatory reports such as emissions inventory reports, and Toxic Release Inventory reports.
- Developed new analytical chemistry methods, prepared standard operating procedures and manuals for new analytical techniques, and managed laboratory safety.

PUBLICATIONS

"Pollution Prevention in the Metal Finishing Industry", EM: Air and Waste Management Association's Magazine for Environmental Managers, Pittsburgh, PA. December, 2000.

“Tools for Integrating Energy Conservation, Materials Productivity, and Quality Efforts,” in proceedings of the Industrial Energy Technology Conferences sponsored by the Department of Energy, Houston, Texas. May, 1999.

“Industrial Case Studies of Water Conservation and Reuse in Texas,” in proceedings of the National Association of Corrosion Engineers National Conference, San Antonio, April, 1999.

“Economic Benefits of Reducing Regulatory Requirements through Pollution Prevention,” in proceedings of the American Institute of Chemical Engineers National Conference, New Orleans, Louisiana, March, 1998.

“Cost Benefits of Reducing Generator Status for Military Facilities,” in proceedings of the Worldwide Joint Services Pollution Prevention Conference, San Antonio, August, 1997.

“Texas Pollution Prevention Partnership: The Nation’s Model P² Partnering Venture,” in proceedings of the Worldwide Joint Services Pollution Prevention Conference, San Antonio, August, 1997.

“Coprecipitation of Formate with Calcium Sulfite Hemihydrate,” Masters Thesis in Chemical Engineering at The University of Texas at Austin, August, 1993.

“Results of a Laboratory Investigation to Characterize Coprecipitation of Wet Limestone Flue Gas Desulfurization System Additives in Calcium Sulfite Crystals,” in proceedings of the Environmental Protection Agency/Electric Power Utility Research Institute 1990 Sulfur Dioxide Control Symposium, New Orleans, Louisiana, May 1990.

“Detection of Cyanide in Wastewater using Ion Chromatography and Electrochemical Detection,” Honors Thesis at Lewis and Clark College, June, 1984.