SUSAN ROOTHAAN

Susan.Roothaan@NurturedWorld.Org

EDUCATION / CERTIFICATIONS

Masters of Science in Chemical Engineering

1989-1993

University of Texas at Austin

Tau Beta Pi National Engineering Honors Society

Bachelors in Chemistry

1980-1984

Lewis and Clark College, Portland, Oregon

Honors Research Grant for work on cyanide detection in plant wastewater

Certified Environmental Management Systems Lead Auditor

February, 2005

RABQSA International, Milwaukee, WI

WORK EXPERIENCE

A Nurtured World, Inc., Austin, Texas

1997-PRESENT

Founder and Executive Director

- Founded and currently serve as Executive Director for A Nurtured World, Inc., a non-profit organization designed to help individuals, communities, businesses, and organizations reduce their environmental impact through innovative training, partnerships, and the use of pollution prevention (P2) programs.
- Develops and delivers consumer and organizational P2 and Environmental Management System (EMS) training using behavior-based training models. Clients have included NASA Johnson Space Center, Houston Advanced Research Center, The U.S. Environmental Protection Agency, Advanced Micro Devices, and Heifer International.
- Develops and delivers curriculum for K-12 educators to enhance critical thinking and understanding of environmental sciences. Adapted and delivered A Nurtured World's Consumer Conservation curriculum to 6-8 grades math, science, and English standards in four states (Texas, Arkansas, Oklahoma, and Illinois).
- Provides hands-on performance-based environmental site visit training in order to build capacity in state and federal government and among other organizations that serve the regulated community.
- Develops software and other methods to measure program effectives.
- Provides broad oversight for A Nurtured World's *Ihouse at a time* program that provides energy and water retrofits including use of solar PV systems for low-income home-owners, while also driving behavior change among the volunteer base that supports the retrofits.
- Manages and directs grants; oversees staff, volunteers, and contractors; assures legal and financial systems are in place and implemented properly; and develops partnerships and funding opportunities to forward the mission of the organization.

Culture Technologies, Austin, Texas

2005-PRESENT

Vice President

• Leads and directs environmental auditing activities primarily focusing on Environmental Management Systems for varied industries such as military installations, power plants, wastewater treatment plants, pharmaceutical companies, and football stadiums.

- Develops and provides training on varied environmental topics ranging from Environmental Management Systems, compliance (air, waste, water), and organizational culture change.
- Provides leadership/organizational strategic planning to support organizations and businesses in the delivery of environmental initiatives and programs.
- Provides regulatory expertise/support for companies and organizations including developing program instructions and guidance and on-line training for topics ranging from managing solid and hazardous waste, to assuring safe drinking water systems, and managing electrical safety.
- Markets and manages projects including developing budgets and proposals. Mentors staff in delivering quality environmental services to clients.

Texas Commission on Environmental Quality (TCEQ), Austin, Texas Senior Technical Program Specialist

2002-2004

- Designed and directed the Texas EMS program including development and implementation of audit protocols, third party auditing standards, and incentives.
- Trained staff in conducting performance-based audits and technical assistance.
- Conducted performance-based EMS audits at a variety of organizations and final review on all audits.
- Worked on several partnerships to compare requirements across EMS standards including the TCEQ EMS program, ISO14001, Responsible Care® Management System (RCMS), and EPA's National Environmental Performance Track.

Texas Natural Resource Conservation Commission, currently TCEQ, Austin, Texas 1994-2002 <u>Team Leader/Engineer Specialist</u>

- Managed several programs including P2 planning requirements, a state-wide material exchange, a state-wide tax exemption program for pollution control equipment, software and database development efforts, measurement of program effectiveness, and on-site technical visits for the regulated community.
- Conducted hundreds of on-site P2 technical visits for a range of facilities including military installations, chemical plants, metal finishers, autobody shops, state agencies, and computer chip manufacturers.
- Delivered P2 workshops and presentations to over 3,000 individuals throughout Texas and Mexico.
- Developed a nationally recognized partnership with the Department of Defense involving over 25 agencies and managed a state-wide partnership to coordinate environmental assistance in Texas.
- Developed innovative beyond compliance training programs incorporating concepts from ISO14001, Natural Step, organizational culture change concepts, and Total Quality Management.

Radian Corporation, currently URS Corporation, Austin, Texas

1984-1994

Staff Engineer/Engineer/Chemist

- Directed and participated in projects to improve wet and dry Flue Gas Desulfurization processes for coal-fired power plants including bench and full-scale testing, field studies, laboratory analysis, and research.
- Prepared environmental permits and regulatory reports such as emissions inventory reports.