

## **EDGAR BERKEY, PH.D.**

### **EXPERIENCE SUMMARY**

- 45 years of successful experience with private and public sector energy and environmental technologies as a technical contributor, manager, reviewer, and consultant, including nuclear, fossil, and alternative energies dealing with technology development and demonstration, strategic planning, program management, science, quality, and policy issues involving DOE, National Laboratories, and DOD.
- Previous member of the DOE Environmental Management Advisory Board (EMAB), EPA Science Advisory Board (SAB), and member and/or Chairman of Advisory and Review Committees at Pacific Northwest National Laboratories (PNNL), Idaho National Engineering and Environmental Laboratory (INEEL), Savannah River National Laboratory (SRNL), and Los Alamos National Laboratory (LANL). Received Award of Excellence from DOE-EM in 2002.
- Strong and broad technical, organizational, and management background with leading edge organizations; ability to lead and participate in multi-disciplinary technical and policy teams engaged in technology assessments, strategy evaluations, and problem solving in a government environment. Able to conduct and direct complex analyses of national environmental, energy, and technology challenges to produce implementable recommendations.
- Demonstrated ability to lead multi-disciplinary technical organizations in Business Development and Quality Programs to achieve Best-in-Class performance. Extensive experience with the Waste Treatment Plant at Hanford.

### **PROFESSIONAL EXPERIENCE**

#### **Longenecker & Associates, Inc. and Senior Management Consultant**

2008-Present

- DOE Office of River Protection (ORP) – Project Manager since 2009 of the Technical, Managerial, and Administrative Support Contract for the DOE Office of River Protection at Hanford, WA, which is engaged in constructing the Waste Treat Plant, the largest radioactive materials processing facility in the world. Contract has involved over 250 Tasks and a like number of contributors.
- DOE Richland Office (RL) – Program Manager since 2013 of a Technical Support Contract for the DOE Richland Office. Contract involves 10 Tasks and over 20 contributors.
- Pacific Northwest National Laboratory (PNNL) – Former member of PNNL Laboratory Advisory Committee; past chair of PNNL Environmental Technology Directorate Review Committee. Recognized by PNNL Director as a “tireless advocate” for science-based solutions, safety, quality, and focused strategic efforts. Developed and conducted novel SWOT workshops to improve Directorate’s strategic planning.
- Savannah River National Laboratory (SRNL) – Served as member of Transition Team for the Laboratory during a Prime Contract transition. Evaluated potential for current and future environmental and energy programs to assist the new operating contractor. Work performed for Savannah River Nuclear Solutions.
- U.S. DOE, Office of Environmental Management (EM) – Co-Team Leader for a Complex-wide external assessment of technical and engineering capabilities of DOE Integrated Project Teams

(IPTs) and how they can achieve Best-in-Class performance. Co-authored DOE Best Practices Guide for Integrated Project Teams, and co-developed IPT training for DOE-EM.

- U.S. DOE, Office of Engineering & Construction Management (OECM) – Team Leader of External Independent Reviews successfully conducted at the High Explosive Pressing Facility (HEPF) at the Pantex Nuclear Weapons Plant and the Uranium Processing Facility (UPF) at Y-12.
- Tampa Yacht Manufacturing (TYM) – Established the foundation and developed the manual and mentoring to create a Quality Program for a high-speed military boat manufacturing company that would be ISO 9001-compliant.

#### **Senior Management Consultant, Pittsburgh, PA**

2007-2008

- North Wind, Inc – Chair of several expert panel reviews on deploying innovative remedial technologies at Hanford. Provided strategic corporate and program guidance based on previously serving on the Board of this woman-owned, Hispanic-American firm, whose annual revenue grew to over \$120 Million.
- Ventana Capital Management – As Executive Director for innovative alternative energy and clean technologies, worked to form a new venture capital fund based on his previous experience chairing the Scientific Advisory Board of the North America Environmental Fund, L.P.
- PDG Environmental – As a consultant to the Board, evaluated major investment opportunities in China for industrial and municipal wastewater treatment and water resources.

#### **Concurrent Technologies Corporation (CTC), Johnstown, PA**

1997-2007

- As Vice President, R&D, and Chief Quality Officer (previously Chief Science Officer), was responsible for overseeing growth of energy and environmental business sector of a \$250 million, 1,500-person, non-profit applied R&D organization focused on DOD. Led creation and development of a recognized Best-in-Class corporate Quality Program that achieved first simultaneous certification for an R&D organization in the U.S. for ISO 9001 (Quality) and ISO 14001 (Environmental Management) in 1998.
- Served as lead technical contributor and corporate organizer for the Hydrogen Economy Road-Map prepared for the Hydrogen Coalition in South Carolina. The results were highlighted in keynote addresses at two consecutive Fuel Cell South Conferences.
- Program Manager of a multi-year, \$150 million technical services contract for National Energy Technology Laboratory (NETL), which included leading several advanced environmental technology assessments, including the first congressionally-mandated External Independent Review of Hanford's \$12 Billion High Level Waste Vitrification Project.
- For over 3 years, was chairman of the nationally-recruited Groundwater-Vadose Zone Integration Project Expert Panel at Hanford, which focused on the site's groundwater remediation and monitoring program.
- Was Co-Director of the EPA-sponsored Groundwater Remediation Technologies Analysis Center and Adjunct Associate Professor of Environmental Engineering at the University of Pittsburgh.
- Member (8 yrs) of DOE's Environmental Management Advisory Board (EMAB); chair of Technology Development and Transfer Committee and member of Science Committee; received DOE Award of Excellence from Assistant Secretary in 2002 and Distinguished Technical Contribution Award in 2006 from Society of Technical Communication for editing Subsurface

Contamination Remediation book based on DOE EM Science Program. Provided congressional testimony on environmental technologies and issues several times and participated on expert panels for the National Research Council and the Congressional Office of Technology Assessment.

- Member PNNL Lab Advisory Committee (4 yrs); chair and member of PNNL Environmental Technology Directorate Review Committee (8 yrs). Chair, Environmental Technology & Engineering Review Committee at Idaho National Engineering and Environmental Laboratory (INEEL) (6 yrs). Environmental Advisory Committee (EAC), Savannah River Site (15 yrs). EPA Science Advisory Board (SAB), Environmental Engineering Committee (4 yrs). External Review Committee of Accelerator Production of Tritium Project at Los Alamos (2 yrs). Conducted numerous assessments, program reviews, and strategy evaluations for DOE.

**Center for Hazardous Materials Research and National Environmental Technology Applications Corporation, University of Pittsburgh Trust, Pittsburgh, PA**

1986-1997

- Co-founder and President of two innovative non-profit organizations devoted to environmental technology development, education, training, technology transfer, and public acceptance. Contributed to the Exxon Valdez spill bioremediation clean-up, hazardous waste incinerator permitting, pollution prevention education, hazardous waste worker training, and development of new environmental technologies. Staff of over 110 people. Merged with CTC.
- Chair of the Savannah River EAC; member of DOE EMAB and EPA SAB. At the request of DOE Assistant Secretary for EM, chaired strategic review of Idaho National Engineering Laboratory (INEL) program. Conducted many assessments & reviews.

**SynCo Consultants, Inc., Pittsburgh, PA**

1981-1986

- Founder/President of environmental consulting firm focused on cutting-edge issues associated with national development of synthetic fuels from coal (Memphis, Conoco, and Westinghouse) and other energy projects. Selected by EPA Small Business Ombudsman to support their office and draft EPA's first official Small Business Regulatory Policy.

**Energy Impact Associates, Pittsburgh, PA**

1977-1981

- Vice President of Westinghouse spin-out responsible for environmental impact statements on nuclear plants (Clinch River Breeder Reactor), coal-fired power plants, and synthetic fuel plants. Developed and implemented successful permitting strategies for synthetic fuel plants.

**Westinghouse Research Laboratories, Pittsburgh, PA**

1967-1977

- Manager, Liquid Metal Technologies, and Senior Research Scientist developing new analytical technologies to monitor liquid metal-cooled fast breeder nuclear reactors, high energy density electro-mechanical machines, alkali vapor lamps, and nuclear plants. Achieved international recognition for the group, including serving as Chairman of the American Nuclear Society's International Conference on Liquid Metal Technology in Energy Production in 1976. Was selected, trained, and functioned as a Westinghouse Nuclear Spokesman to promote nuclear energy on a wide outreach basis throughout the country using public media outlets.

## EDUCATION

Ph.D., Engineering Physics (Major: Nuclear Science and Engineering; Minors: Astrophysics, Physical Chemistry), Cornell University (Sigma Xi)

B.S., Chemical Engineering, Stanford University, (With Distinction; top 5% of Engineering School; Phi Beta Kappa; Tau Beta Pi; Phi Lambda Upsilon)

Executive MBA Program, University of Pittsburgh

## PROFESSIONAL AFFILIATIONS

- **American Nuclear Society** (Patron); **Kent BioEnergy Corp.** (Advisor on biofuels)
- Board/Advisory Member – **Chester Engineers** (largest African-American-owned civil engineering firm in U.S.); **SanRx Pharmaceuticals** (start-up, with low toxicity, oral dosing, anti-cancer drug).

## AWARDS AND HONORS

- Texaco Scholarship, Stanford, 1957-1962
- President, Stanford-in-Germany, Group IV, 1960
- Senior Resident Advisor, Freshman's Men Dormitory, Stanford, 1961-62
- Phi Beta Kappa, Tau Beta Pi, Phi Lambda Upsilon, Stanford, 1962  
Engineering School Graduation Recognition, Top Five Percent, Stanford, 1962