

RESUME OF MICHAEL A. BROWN, PE

EDUCATION: MS Civil Engineering, University of Colorado; 1991
BS Geological Engineering, University of Idaho; 1980

PROFESSIONAL EXPERIENCE: 35 Years

EMPLOYMENT HISTORY:

Rule Engineering, LLC; Principal Engineer & Managing Member, 1997 - Present

Responsible for technical oversight of Rule's environmental work product. Technical expertise includes multi-media environmental permitting and auditing, development of operations oriented environmental management programs and systems; regulatory compliance strategy development and advocacy. Competent in federal and numerous state environmental regulations, including CAA, RCRA, CWA, OPA and EPCRA. Also experienced in aspects of CERCLA and TSCA and process safety management. Significant experience providing environmental engineering and management services for petroleum refineries, related oil and gas facilities/terminals, manufacturing and construction. Additional responsibilities include managing the operational and financial aspects of Rule Engineering, LLC.

Total Petroleum, Inc.; Corporate Environmental Manager, 1994 - 1997

Refinery Environmental Manager, 1995 - 1996

Senior Environmental Engineer, 1993 - 1994

Marketing Environmental Manager, 1988 - 1993

Progressive responsibility for identifying and evaluating Total's environmental risks, and formulating, implementing and managing business focused environmental risk management solutions, programs and systems. Specific responsibilities and projects included: multi-media environmental auditing in refining; corporate risk probability and economic analysis; management system formulation and implementation in refining and marketing; RFI and remediation project management at operating and non-operating refineries; management of a NEIC multi-media inspection at a refinery; negotiations of federal and state alleged NOV's in air, water, waste and remediation; assisted in risk management planning for a waterfront-terminal and refineries, conducted a seven-jurisdiction area exercise at a waterfront-terminal; provided technical support and expert testimony in federal court, arbitration and mediation; completed all forms of environmental reporting for agencies, business units and corporate; and managed a \$10MM annual construction budget in marketing and multi-million dollar remediation budgets for numerous facilities/projects.

Fox & Associates, Inc.; Project Manager, Project Engineer, 1982 - 1988

Northern Testing Laboratories, Inc.; Staff Engineer, 1981 - 1982

Managed geotechnical, geological and environmental engineering projects at disposal, commercial, industrial, municipal and mining sites in the mid-continent area. Designed and provided construction management of a 2500 foot long slurry wall; conducted groundwater investigations and pumping well tests and evaluated slope stability, seepage and foundation concerns at tailings dams and earthen dams. Assisted with the design of landfills, 404-permit preparation and mined land reclamation evaluations.

ADDITIONAL SKILLS & TRAINING:

Registered Professional Engineer (CO, WY, TX, UT, NM, OK)

Colorado Listed Environmental Consultant, #6069

OSHA 5810, 40-hr Oil & Gas Safety Training

Safe Land Training (Oil & Gas Safety Training)

29 CFR 1910.120 HAZWOPER 40-hr training with current 8-hr refresher

ConocoPhillips Safety Leadership for Supervisors