James L. Grant
Principal Engineer, AquAeTer Technical Consultant

Summary
- More than 30 years experience in environmental consulting and engineering applications
- Litigation support and expert witness testimony
- Senior Technical Consultant

Education
Ph.D., Civil Engineering (Hydraulics, Hydrology), Georgia Institute of Technology
M.S., Applied Mathematics, Georgia Institute of Technology
B.E., Civil Engineering, Georgia Institute of Technology
B.S., Applied Mathematics, Georgia Institute of Technology

Licenses and Certifications
Registered Professional Engineer
Registered Geologist
Registered Land Surveyor

Qualifications
Dr. Grant has been a Technical Consultant to **AquAeTer** since 1997, and previously was the founder and chief Technical Consultant for James L. Grant and Associates, Inc. Dr. Grant also was President and Chief Executive Officer of Grant Environmental, Corporate Consultant to Law Engineering Testing Company, and Chief Engineer of Nuclear Engineering Company, Inc. (now US Ecology, Inc.).

Waste Management and Disposal - Provided technical direction and consultation in waste management and disposal to companies across the United States. Conducted technical training in waste disposal to a team of Chinese scientists. Experienced in all aspects of the management and disposal of nuclear and hazardous waste, including site selection and characterization, design and performance evaluation, and the development of site closure and monitoring programs. Provided expert witness testimony to the National Academy of Sciences regarding siting of low-level radioactive waste site in California. As former Chief Engineer for US Ecology, experience includes all engineering and geologic aspects of site design, permitting, and the operations of three low-level radioactive waste disposal sites and three hazardous waste disposal sites.

Surface-Water and Ground-Water Hydrology - Experienced in many aspects of surface-water and ground-water hydrology. Specific experience includes the evaluation of surface-water and ground-water supplies, ground-water protection and contamination studies, geochemical studies, surface-water hydraulics, and dam and reservoir design. Conducted numerous investigations requiring surface-water and ground-water hydrology and geotechnical engineering expertise. Supervised the design, operation, and licensing of hazardous and nuclear waste disposal sites; the water supply and accident analysis of numerous nuclear and conventional power plants; the design of ground-water supply systems; and the design of subsurface injection systems. Authored more than 200 technical publications and reports on waste disposal, statistical analysis, and surface-water and ground-water hydrology.

Litigation Support and Expert Witness Testimony - Provided expert witness testimony in the specialties of civil engineering, hydrology, and waste disposal. Testified in court cases and before state regulatory agencies and legislative committees in Illinois, California, Nevada, Texas and Kentucky. Testified in hearings held by the U.S. Nuclear Regulatory Commission relative to nuclear waste disposal facilities and nuclear power plant siting and design.

Design and Management of Subsurface Investigations - Managed numerous projects requiring investigation and testing of subsurface conditions. Representative projects include investigations in the southeast, midwest, and Gulf Coast areas, as well as investigations in the Rocky Mountain areas of Colorado and Utah, and the desert areas of Nevada and California.

Numerical Simulation - Experienced in the design, coding, and use of numerical models for the simulation of various systems. Experience includes performance simulation of various C5-A missions and the design and coding of a simulation of the air defense mission of AWACS. Extensive experience in modeling the hydraulic behavior of surface-water and ground-water systems and in modeling the movement of contaminants through the ground-water system. Served as a mathematical analyst for a major defense contractor.

Employment

AquAeTer, Inc. – Senior Technical Consultant, 1997 – present.

Scientech, Inc./Grant Environmental, Inc. - Senior Technical Consultant, 1995 - 1997.

James L. Grant and Associates, Inc./Grant Environmental, Inc. - President and CEO, 1983 - 1995.

Law Engineering Testing Company - Corporate Consultant and Chief Hydrologist for Western Operations, 1973-1977,.1979 - 1983.

US Ecology (f/k/a Nuclear Engineering Company) - Chief Engineer, 1977-1979.

Affiliations/Honors

American Geophysical Union
National Society of Professional Engineers
Sigma XI, Scientific Research Society

Publications

"Design and Impact Analysis for Diversion at Coal Creek Mine, " with D.S. Bowles, W.E. Humphries, and A.P. O'Hayre, American Water Resources Association, Water Resources Bulletin, February 1986.

"Geotechnical Measurement at the Maxey Flats, Kentucky Low-Level Radioactive Waste Disposal Site—Lessons Learned," Proceedings of the Symposium on Low-Level Waste Disposal, Arlington, Virginia, June 16-17, 1982.

"Sensitivity Analysis of Seismic Hazard Studies in the Southeastern United States," with M.C. Chapman and J.C. Drumheller, Proceedings for Earthquakes and Earthquake Engineering, Eastern United States by James E. Beavers, 1981, Ann Arbor Science Publishers, presented at Knoxville, Tennessee, September 1981.

"Chemical Migration of Radioactive Material in Soil," with F.L. Parker, Tutorial Session on Alternate Fuel Cycle, 25 Annual Meeting of the American Nuclear Society, June 5, 1979, Atlanta, Georgia.

"A Least Squares Method for Computing Statistical Tolerance Limits," with J.R. Wallace, Water Resources Research, 13(5) pp. 819-823, 1977.

"Statistical Frequency Analysis by Optimization of Density Functions to Histograms," Ph.D. Thesis, School of Civil Engineering, Georgia Institute of Technology, Atlanta, Georgia, 1973.

"A Hypercircle Method for Determining the Influence Coefficients of Thin Cylindrical Shells," M.S. Thesis, School of Mathematics, Georgia Institute of Technology, Atlanta, Georgia, 1967.