PHILIP T. TRINGALE, PhD, PE

SENIOR CONSULTANT AND CHAIR

ENVIRONMENTAL CONSULTING AND LITIGATION

Dr. Tringale is a Senior Consultant and the Chair of the Board of Directors at Langan. He is based in California and has more than four decades of consulting experience focused on environmental impairment, restoration, and redevelopment. Throughout his career, Dr. Tringale has served in senior technical, management and governance roles for engineering firms providing environmental, geotechnical, and civil engineering services regionally and internationally. As a Senior Consultant, Dr. Tringale provides consulting and expert witness services to a diverse group of public and private sector clients throughout the United States both directly and through counsel.

For environmental impairment matters, Dr. Tringale has directed numerous site assessments and remediation programs involving soil and groundwater affected by contaminants. He also has particular expertise in site characterization and the use of in-situ testing to evaluate soil types and properties. His experience includes contaminated soil and groundwater issues; Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) remedial investigations and feasibility studies; cost estimating and allocation; soil and groundwater remediation and redevelopment; and third-party review and strategic consulting.

As a testifying expert and litigation consultant, Dr. Tringale has provided expert witness and consulting services on numerous cases. For technical support of litigation, he has prepared expert reports, participated in mediation, and given testimony at trial in state and federal court. Relevant opinions for liability and allocation issues have related to compliance with the National Contingency Plan, identification of contaminant sources, assessment of magnitude and extent of contamination, evaluation of remediation programs, review and development of remedial cost estimates, and allocation of cost and responsibility.

REPRESENTATIVE EXPERTISE:

- · Identification of contaminant sources to soil and groundwater
- Evaluation of groundwater quality and remediation systems
- Assessment of type and extent of contamination
- Review of CERCLA-driven investigations and remediation
- Assessment of remediation and redevelopment designs
- Evaluation of environmental impacts from ruptured pipes and tanks
- Forensic assessment of historic industrial and landfill releases
- Assessment of potentially responsible party (PRP) contributions
- · Development of remedial costs and PRP cost allocation models
- Compliance with the National Contingency Plan



EDUCATION

PhD, Civil Engineering University of California, Berkeley

Master of Engineering, University of California Berkeley

M.S., Civil Engineering Drexel University

B.S., Civil Engineering Northeastern University

PROFESSIONAL REGISTRATION

Professional Engineer California New York

AFFILIATIONS AND HONORS

American College of Forensic Examiners, Diplomate of the American Board of Engineering and Technology

University of California, Berkeley, Civil and Environmental Engineering, Academy of Distinguished Alumni

REPRESENTATIVE PROJECTS AND SERVICES

Northern California

- Brisbane Source Identification and Subsurface Assessment
- Emeryville Brownfield/Redevelopment Agency Site Evaluation
- Pittsburg Landfill Releases and Closure Assessment
- Redwood City Port Facility Characterization and Releases
- San Francisco Industrial Facility Subsurface Contamination
- San Jose Computer Circuits Facility Release Assessment
- Stockton Dry Cleaning Facility Groundwater Contamination
- Sunnyvale Electronic Facility Releases and Remediation

Southern California

- Burbank Commercial and Industrial Facility Releases
- Los Angeles Redevelopment Site Assessment
- Rialto Historic Releases and Remedial Cost Evaluations
- San Bernardino Airport Assessment
- San Fernando Groundwater Contamination Studies
- Santa Ana Evaluation of Release Sites and Costs
- Sante Fe Springs Assessment of Release Sources
- Southgate Forensic Evaluation of Superfund Impact Zone

Colorado, New York, New Jersey, Texas

- Train Derailment and Emergency Remediation
- Groundwater Contamination of Drinking Water Supply
- Site Characterization and Treatment System
- Remediation Evaluations and Cost Estimating
- Sports and Exposition Authority Development Assessment

AFFILIATIONS AND HONORS (continued)

American Society of Civil Engineers

National Civil Engineering Honor Society

National Ground Water Association

PATENT

Acoustic Penetrometer for Subsurface Soil Characterization

TESTIMONY AND PUBLICATIONS

Available Upon Request

