



AIR-WATER-SOIL MONITORING & MODELING ...Real-World Understanding

OBJECTIVE

Environmental media (whether air, water, or soil) are investigated to determine their chemical contents for five principal reasons: (1) To verify the presence or absence of suspected contaminants; (2) To determine whether contaminants are present at hazardous concentrations or otherwise above applicable State, Federal or local standards; (3) To evaluate the extent and magnitude of contaminant distributions; (4) To monitor changes in contaminant concentration and distribution; and (5) To provide a basis for estimating the cost of remediating hazards associated with the presence of hazardous substances.

SAMPLING

Clean Properties' scientists have the scientific expertise to identify the specific contaminants most likely present based on an identified release or current/historic land use; to recognize environmental conditions that affect the partitioning of those contaminants among potentially exposed air, water, and soil; to design a sampling program to identify most efficiently the extent and magnitude of the contaminants and their fates; and to evaluate this information to determine the most effective remedial options and their approximate costs. **Clean Properties'** scientists and technicians are completely trained in current applicable sampling protocols and sample preservation methods — including those of the Massachusetts Department of Environmental Protection (MDEP) for implementation of Massachusetts Contingency Plan (MCP) actions, those of the U.S. Environmental Protection Agency (USEPA) for implementation of Superfund or CERCLA actions, and those of private research agencies such as the American Society for Testing and Materials (ASTM) and the American Petroleum Institute (API). **Clean Properties** maintains appropriately calibrated instrumentation for the sampling and field screening of accessible air, water, and soil. When access requires specialized equipment such as drill rigs, **Clean Properties** has prequalified equipment contractors available to provide support services, selected for individual projects on a cost and delivery basis.

ANALYSIS

Clean Properties reviews the analytical requirements of each project to determine appropriate levels of quality assurance and quality control — from field screening protocols to complete USEPA Contract Laboratory Program (CLP) Level-One Quality-Assurance Protocols. **Clean Properties** does not maintain costly inhouse laboratory capabilities. Instead, **Clean Properties** conducts an ongoing review of the price, delivery, and qualifications of numerous laboratories in New England and throughout the United States. **Clean Properties'** laboratory prequalification process assures that analyses will be performed to the highest standards of applicable quality-assurance levels, in the shortest period of time, and at the best price. **Clean Properties** thoroughly reviews all laboratory data to assure its accuracy and appropriate interpretation. **Clean Properties** uses USEPA-approved field screening tools to select and minimize samples for laboratory testing.

DATA EVALUATION AND INTERPRETATION

Clean Properties' staff consists of scientists and engineers having 20 years of broad environmental experience on average. **Clean Properties'** staff have conducted and managed hundreds of site investigations and interpreted resulting data within the scope of MCP or CERCLA investigations, feasibility studies, remedial action plans, and other client needs. **Clean Properties'** knowledge of chemical behavior, sampling methods, and laboratory protocols assures you that errant data will be identified prior to its use in interpretative assessments and that verified data will be interpreted to the maximum extent supportable. As soon as results and conclusions are available, **Clean Properties** discusses their implications with you — thus assuring that you are informed of investigation progress at each stage. Whenever data evaluation indicates that additional investigations or actions are required, **Clean Properties** prepares a scope of work and cost estimate for those activities. **Clean Properties** documents the results of its evaluations in thorough reports appropriately directed to their intended audiences.

MODELING

Clean Properties has developed numerous air and groundwater models to further assess limited available data and predict conditions under possible future or changed conditions. Staff are knowledgeable in applying a variety of government-accepted numerical models to evaluate quality, flow, and transport.