BOOK REVIEW

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Review of *Environmental Forensics: Principles & Applications*

REFERENCE: Morrison, RD. Environmental forensics: principles & applications, CRC Press, LLC, Boca Raton, Florida, 2000, 351 pp.

Dr. Morrison's purpose for the text was to provide a working reference for the practicing environmental attorney and the environmental consultant. His intent with this text was to provide significant information in order to distinguish between evidence and opinions based on scientific methods with that of "junk science."

As a working reference text, the topics and examples selected were issues encountered in environmental litigation, how they should be evaluated, data and information needed, limitations of use of data, and accepted methodology.

Chapter 1, "An Overview of the History, Chemistry, and Transport of Chlorinated Solvents," and Chapter 2, "Chemistry and Transport of Petroleum Hydrocarbons," provide a working overview of information pertaining to these topics. The foundation information in these chapters was apparently selected for assistance in deciding which tools described in Chapter 4, "Forensic Techniques Used in Environmental Litigation," would be applicable under particular circumstances.

Chapter 3, "Identification of Biased Environmental Data," and Chapter 5, "Contaminant Transport Modeling," provide information on how to recognize biased environmental data and present suggestions concerning the evaluation of transport modeling.

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Chapter 6, "Forensic Review of Environmental Trial Exhibits," describes techniques for the evaluation of settlement and trial exhibits along with animations.

There are six Appendices which include "Sample Calculation for the Transport of PCE Vapor through Concrete Pavement," "Sample Calculation for the Transport of PCE Liquid through Concrete via Diffusion," "Properties of Alcohol Oxygenates and Ether Oxygenates," "Advective and Partitioning Transport Equations of Radon for Detecting Diesel in Groundwater," "Chemical and Commercial Synonyms for Selected Chlorinated Solvents and Aromatic Hydrocarbons," and "Laboratory Terms and Definitions."

The intent by Dr. Morrison in the creation of this very good text was well conceived for the environmental scientist and the well informed attorney. The subject matter is presented for the evaluation of transport and fate of chemicals under unique circumstances rather than the established models for the determination of transport and fate of chemicals utilized in health and risk assessment protocols. One must realize, however, that this text is not for quick referencing under rushed conditions. It must be studied quite extensively in order to fully appreciate the information provided. In addition, for one to understand the models presented they must have a good working knowledge of advanced mathematics.

Environmental Forensics: Principles & Applications will be an excellent tool as an add-on for reference in conjunction with the presently accepted models for the evaluation of chemicals in the environment, their transport, fate, and ultimately health and environmental impact.