

EXPERT WITNESSES:

ENVIRONMENTAL CASES

THOMAS J. BOIS

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EXPERT WITNESSES: ENVIRONMENTAL CASES

by Thomas J. Bois

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PREFACE

“The noble lie will inform them that they are better than those they serve and it is, therefore, their responsibility to guard and protect those lesser than themselves. We will instill in them a distaste for power or privilege, they will rule because they believe it right, not because they desire it. . .”

Plato, Republic
(c. 360 B.C.)

In Plato’s Republic we can first read the first debate about “expertise”. Plato’s “Noble Lie” discusses the concept of whether the populace is bright enough to look after either their own interests or society’s interest. Plato suggests there may only be a few “clever” people of the world and that the “clever” are needed to lead the rest of us. Thus, Plato discusses the idea that only the elite should know the truth in its complete form. Our leaders must tell us “The Noble Lie” to keep us passive and content and avoid the risk of civil unrest. Thus, the creation of an elite form of special knowledge—i.e. expertise came about.

This book is designed to provide environmental attorneys (and environmental experts) with what they need to know about how to themselves master the special knowledge and skills associated with environmental science and environmental litigation practice. This mastery process involves: when and how to retain an environmental expert; how to “tap” their expertise and learn from them; how and when to disclose their findings and opinions; and how to both present and challenge expert opinions at deposition and in trial. This book attempts to blend discussions of both substantive laws (statutes, civil procedure rules, evidence rules and case law) along with an equal dose of practice pointers which in many cases are culled out and highlighted for the reader. Lastly, to aid in the use of this book as a trial resource we have added full text sections of the applicable Federal Rules of Civil Procedure, Federal Rules of Evidence and the key U.S. Supreme Court, Federal Court of Appeals and District Court decisions regarding admissibility of scientific evidence. We ask that you contact us with any suggestions, criticisms, or questions concerning this text.

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DEDICATION

I dedicate this book to my wife Sandi who always encourages my writing projects, my son Josh who keeps me young thinking, and to the innumerable geologists, engineers and other scientific experts who have patiently listened to my countless questions and in return taught me so much.

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RESEARCH REFERENCES

West's Key Number Digest

Evidence ⇌470

Westlaw Databases

- Environmental Liability Allocation: Law and Practice (2007 ed.) (ENVLIABLAW)
- Examination of Witnesses (2d ed.) (EXAMWIT)
- NEPA Law and Litigation (2d ed.) (NEPALL)

Treatises and Practice Aids

- Zuckerman, Bois, and Johnson, *Environmental Liability Allocation: Law and Practice* § 11:1 (2007 ed.)
- Mogill, *Examination of Witnesses* §§ 6:1 to 6:4 (2d ed.)
- Mandelker, *NEPA Law and Litigation* § 4:47 (2d ed.)

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§ 1:1 Introduction

When dealing with environmental disputes, the expert testimony is the centerpiece around which the rest of the case is built. The process begins with the search for one or more qualified specialists capable of understanding and communicating the complex issues at hand. Next is the data accumulation and analysis phase. What then follows is the expert preparation and deposition stage. Finally, the trial preparation and trial testimony stage occurs.

Even for experienced litigators and seasoned trial attorneys, this process is almost always going to be an emotional rollercoaster of challenges and breakthroughs. It is both a blend of scientific precision (including preparation and organization) and artistic presentation. This blending of science and art begins at the outset of the case and continues on to, through, and even after trial.

◆

§ 1:2 Case analysis and workup (theme, theory, etc.)

It is never too early for environmental counsel prosecuting a claim to begin assembling the expert team. As soon as possible, counsel must begin analyzing the nature and extent of the pollutants (*see* § 4:2). Often, counsel will find that experts have pockets of expertise with particular types of facilities, pollutants, and cleanup methods. Counsel will likewise find that they will need experts in multiple disciplines: pollutant investigation and cleanup design, human health risk assessment, and clean cost estimating and contracting. Experts retained at this early stage may demonstrate basic technical competence but may lack the communications or forensics skills to be used to provide deposition or trial testimony. Nontestifying experts can be used as undesignated consultants and technical coordinators. Those experts that demonstrate strong communications skills will help develop the factual theories of the case and the technical case themes.

Defense counsel is immediately put in a position of playing catch up. Frequently, the defense counsel's client will be the current operator, or former owner or operator at a site. Defense counsel may sometimes learn the identity of one or more of the claimant's experts. This information may come from expert reports voluntarily disclosed by claimants, from agency records, or other sources. The defense counsel will want to assemble all agency information publicly available (*see* § 4:3). The defense counsel will also want to task the experts to identify all data gaps that need to be filled.

§ 1:3 Regulatory compliance

Those environmental counsel representing existing or former owners and operators of facilities understand that there is always an "interested third party" to legal disputes involving polluted property. Federal and state laws require the reporting of pollutant releases to one or more state and/or federal administrative agencies. The willful failure to report pollutant releases allows pollutants to spread and can cause unsafe exposure of the public to harmful chemical substances. Thus, the risk of severe federal and state fines and penalties compels owners and operators to notify government agencies of pollutant discoveries. Once government agencies are notified of the discovery of pollutants, a myriad of site assessment, cleanup feasibility, and cleanup effectiveness analyses will be directed or ordered. Licensed professionals (*e.g.*, geologists, engineers) must perform these types of investigations. Environmental counsel representing the current owner or operator will need to recruit and hire licensed professionals to perform these

tasks. The government agencies will require the submission of work plans, permits, sampling, and testing data. These government agencies will also require the preparation and submission of reports from these experts containing analyses and opinions. These same experts that are providing compliance assistance will likely also come to play some role as testifying witnesses. As a result of the public documentation of these expert witnesses' analysis, the environmental attorney prosecuting a claim is also faced with managing the control of percipient testimony. Likewise, prosecuting counsel will continuously have to oversee and manage the development and release of this documentation. Prosecuting counsel will not want to inadvertently disseminate future expert testimony. Prosecuting counsel must consider having its experts perform forensic analysis at the same time the experts perform the work required by the government agencies (*see* § 4:2). Forensic analyses will help identify the types and dates of releases—which will help pinpoint who is responsible. If technical data points to the identity of responsible parties, then prosecuting counsel will want the experts to highlight this information to the government agencies. Counsel will need to decide if the “compliance” experts will be also be used as testifying experts, or whether they will be mere expert observers.

Likewise, environmental counsel defending presuit claims during the compliance stage will want to play an active role. As discussed above, the government agencies direct several stages of work to be performed to assess the nature and extent of pollution and how best to clean it up. At each stage of government agency-directed work, defense counsel must assess the impact of the new data on the claims presented. The defense counsel will want to carefully evaluate each work plan. They may need to request modification of the scope of work. This may be necessary to ensure there are no data gaps left that are harmful to the defense case. To do this, defense counsel must share all agency communications with their experts (*see* § 4:3). They must assess how they will use or deal with the new information at deposition or trial. The defense counsel and experts must also be on alert for efforts by the prosecuting counsel to urge the government agency to designate their clients as responsible parties.

§ 1:4 Litigation support and trial testimony

Ultimately, the legal dispute will likely result in a legal action being filed and counsel progressing past the case analysis and regulatory compliance stages. Once a lawsuit has been filed and nonexpert discovery has been commenced, environ-