BOOK REVIEW

THE LAST GREAT CLEAN AIR ACT BOOK?

by

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The Clean Air Act Handbook, Robert J. Martineau & David P. Novello eds. (1998, American Bar Association, 587 pages, $120 ($110 for members of the ABA Section on Natural Resources, Energy, and Environmental Law)).**

"The Devil is in the details."

— Anon

I. INTRODUCTION

Environmental lawyers are already blessed with several excellent summary overviews of the Clean Air Act (CAA).1 As useful as these general roadmaps are, however, every practicing environmental lawyer knows that "the devil is in the details." For every statutory section, the administrative rules and regulations are at least an order of magnitude more complex than the statute itself; beneath the rules lie numerous interpretations, caveats, exceptions, guidance documents, regulatory preambles, agency manuals, letter rulings, policies, precedents, and manifold other administrative utterances. These administrative constructions and interpretations add at least another hundredfold to a thousandfold of additional detail.2 Together the multiple levels of

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** The Clean Air Act Handbook is available only from the American Bar Association: Phone: (800) 285-2221; Fax: (312) 988-5568; E-mail: info@abanet.org.


2 For an overview of the various types of administrative actions and their differing
administrative law-making form a vast interpretative pyramid of stunning detail and complexity that translates "law at the wholesale level" (the goal proclaimed in the statute) into "law at the retail level" (the specific, enforceable dictates to a regulated entity).

The reality of environmental law practice today takes place deep down in the interpretative pyramid, not in the statutes and regulations at its apex. Following the *Chevron U.S.A. v. NRDC* decision, no competent environmental lawyer would dare to advise a client based upon the wording of the statute alone. In the post-*Chevron* era, the issue in advising a client is no longer what the words of the statute seem to say, but what the agency has said that they say, and whether that administrative construction is within the broad parameters of agency discretion defined by *Chevron*.

Until now, Clean Air lawyers have lacked a reference that goes beneath the statute and regulatory apex into the nitty-gritty of regulatory interpretations. *The Clean Air Act Handbook* fills this void admirably. Edited by two former CAA staff attorneys at EPA's Office of General Counsel (EPA/OGC), Robert Martineau and David Novello, *The Clean Air Act Handbook* guides us several levels deeper into the vast legal and regulatory thicket that is the CAA.

This 587-page book is about as good as it gets in its field. Twenty chapters, each written by an expert in a facet of the CAA, set out succinct and lucid explanations of how each program works, and at least a brief overview of the key administrative interpretations. The real treasures for lawyers, however, are the footnotes at the back of each chapter. The footnotes are an invaluable guide to the key administrative interpretative documents and preambles, which are an important source of law, but are often hard to find. No one practicing seriously in the CAA field can afford to be without this book.

Part II of this Review surveys a few of the highlights, and identifies some of the outstanding strengths and weaknesses of *The Clean Air Act Handbook*. Part III provides a brief analysis of the sources of legal complexity in environmental law that make a book like *The Clean Air Act Handbook* a necessity. Finally, Part IV offers some speculation regarding the future of this genre of legal publishing.

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4 See Chevron U.S.A., 467 U.S. at 866.
In general, the limits of The Clean Air Act Handbook are the limits of its genre, a book printed using a 500-year old technology of paper, ink and printing press. It is expensive, over $120 in paperback! In addition, it was outdated by continuing regulatory developments even before it was published—and it becomes more obsolete with each passing day and issue of the Federal Register. For these reasons, The Clean Air Act Handbook may be the “Last Great Clean Air Book.” No printed book can really keep up with the constantly changing details of CAA implementation, nor any of the other fast-evolving areas of environmental law. This Review ends with speculation on how the development of the Internet may change the field of specialized legal publishing.

II. HIGHLIGHTS, STRENGTHS, AND WEAKNESSES

Excellent as The Clean Air Act Handbook is, the book does have its limitations. As with every book written by multiple authors, there is some variation in quality among the chapters in The Clean Air Act Handbook. One of the best chapters is Vickie Patton’s “The Visibility Protection Program.” Ms. Patton, a former EPA/OGC staff attorney who recently joined the Environmental Defense Fund, explains the complex history of the visibility protection requirements of the CAA with admirable clarity and perspicacity. Her account is particularly noteworthy because of her talent in capturing significant details without overwhelming the reader with irrelevancies.

Visibility protection is clearly one of the “sizzling sleepers” of the CAA, as the recent controversy surrounding EPA’s development of “regional haze” rules illustrates. The underlying problem, which Ms. Patton alludes to at least indirectly, is the seemingly absolute commands of Congress to protect visibility in the CAA Amendments of 1977. Administration after administration has squirmed, pettifogged, creatively construed, and avoided taking decisive, nationwide action to protect visibility. This reluctance is at least partially attributable to a perceived lack

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6 Cf. Patricia M. Wald, The Sizzling Sleeper: The Use of Legislative History in Construing Statutes in the 1988-89 Term of the United States Supreme Court, 39 AM. U. L. REV. 277, 281 (1990) (noting that the use of legislative history in interpreting statutes is under “aggressive assault” by the textualists on the U.S. Supreme Court).
7 EPA Staff Consider Revising Performance Targets in Regional Haze Rule, INSIDE E.P.A., Feb. 6, 1998, at 7, 12.
of political support for a multi-billion dollar program to protect against haze in the National Parks and other sensitive ecological areas, despite the statutory language to the contrary. Eventually the seeming contradiction between strong statutory language and weak political support will have to be resolved.

There are a few heroic moments in the otherwise dismal history of visibility protection. One great success story, which Ms. Patton relates with admirable clarity, accuracy, and balance, is the 1991 negotiation among environmentalists and industry, facilitated by EPA, that resulted in successful controls on the huge Navajo Power Station. These controls ameliorate visibility problems in Grand Canyon National Park. As Ms. Patton rightly describes, this episode was truly a great success story for negotiating rules. Typically, EPA had proposed three alternatives to address the visibility problems in the Park: (1) do nothing; (2) require a modest seventy percent reduction in sulfur dioxide (\text{SO}_2) emissions,\(^8\) that was favored by industry but opposed by environmentalists; or (3) require a ninety percent reduction in SO\(_2\) emissions, that was favored by environmentalists, but opposed by industry because of the associated costs.

Rather than decide among these stark alternatives, EPA Assistant Administrator for Air and Radiation, Bill Rosenberg, a devotee of what the Bush Administration called “negotiated rulemaking” and the Clinton Administration now calls “stakeholder participation,” got the interested parties together for a dialogue outside of the artificial atmosphere of written comments and stating formal positions on the record.\(^9\) As predicted by the

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\(^8\) Sulfur dioxide “converts to visibility-impairing sulfates through transformation in the atmosphere . . . .” Patton, supra note 4, at 171.

\(^9\) E. Donald Elliott, Re-Inventing Rulemaking, 41 DUKE L.J. 1490, 1492-93 (1992), observing that:

No administrator in Washington turns to full-scale notice-and-comment rulemaking when she is genuinely interested in obtaining input from interested parties. Notice-and-comment rulemaking is to public participation as Japanese Kabuki theater is to human passions—a highly stylized process for displaying in a formal way the essence of something which in real life takes place in other venues. To secure the genuine reality, rather than a formal show, of public participation, a variety of techniques is available—from informal meetings with trade associations and other constituency groups, to roundtables, to floating “trial balloons” in speeches or leaks to the trade press, to the more formal techniques of advisory committees and negotiated rulemaking.

Id. at 1492-93.
academic literature on negotiation, real dialogue among the interested parties about their interests, rather than their stated positions, led to identification of a new win-win alternative that had been previously overlooked by EPA. Although it did not really agree with EPA’s technical case asserting that the plant caused significant adverse effects on visibility in the Grand Canyon, industry grudgingly acknowledged the need for additional controls. Industry was not opposed to the ninety percent control option per se or on principle; it was just that it was too expensive because it would have required a back-up emission control system. The options under consideration used a thirty day averaging time. If one of the primary control systems failed, there wouldn’t be enough time to mitigate any excess emissions resulting from system failure, by over-control, after the system was operational. It turned out that ninety percent control with a longer averaging time was actually cheaper than seventy percent control with the averaging time originally proposed by EPA. That approach, one which EPA had never considered, was finally adopted with the support of all concerned. Like all good settlements, it was probably one that all the parties walked away from a little unhappy, or in more formal terms, it was an acceptable second-best solution for all concerned. It has recently become popular among some academics to denigrate negotiation among interested parties of administrative rules. The Grand Canyon case, as described by Ms. Patton, is a concrete example of how and why the process can work to identify creative, win-win approaches that would have been overlooked by the Agency if left to its own devices.

Another especially fine chapter is one by co-editor Robert Martineau on the new system for regulating air toxics under section 112 of the CAA, established by the CAA Amendments of 1990. This complex structure is explained with admirable clarity and simplicity by Martineau. He also describes with great insight many of EPA’s early interpretations of section

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10 LOUIS FISHER & WILLIAM USEY, GETTING TO YES (1981) (summarizing in popular form the results of many years of study of the negotiating process by the Harvard Negotiation Project).

11 See generally E. Donald Elliott et al., Toward a Theory of Statutory Evolution: The Federalization of Environmental Law, 1 J.L. ECON. & ORG. 313 (1985) (explaining the importance of the credible threat of something worse in motivating parties toward their second-best preferences).

112—many of which he was involved in as the responsible EPA/OGC staff attorney—and their implications for the future.

Other particularly strong chapters are "Regulation of Fuels and Fuel Additives" by Jonathan Martel,13 "The Acid Rain Program" by Jill Grant,14 and "Overview of the Title V Operating Permit Program" by co-editor David Novello.15

At the opposite end of the spectrum, in my opinion, is the introductory chapter on the history of the CAA. For example, we are told with wide-eyed simplicity that: "World history provides examples of air pollution problems ever since the roots of civilization. People probably complained about the smoke as soon as man invented fire. For CAA practitioners, it is often illuminating and helpful to find earlier examples of current problems."16 But nowhere are we really told what all this "history" is supposed to mean, and what conclusions to draw from it.

Overall, the book is heavy on practical details and light on theory or policy recommendations. This is not a book for academic lawyers looking for a new overarching theory of why the CAA is as it is, or creative ideas about how it might be improved. It is, rather, a treatise for lawyers interested in understanding how the various programs under the CAA actually work. No work that I know of does a better job of performing the limited but important mission of leading the uninitiated through the circuitous byways of one of the most complex areas of environmental law.

III. LEGAL COMPLEXITY IN ENVIRONMENTAL LAW: WHY THE CLEAN AIR ACT HANDBOOK IS AN ESSENTIAL REFERENCE

Perhaps the central defining feature of environmental law in the United States is its mind-numbing complexity and detail. A decade ago I used to argue with my tax colleagues about whether tax law or environmental law was more complicated. They gave up long ago; we won—or lost! Today there is no serious question that environmental law is the most complicated

15 David P. Novello, Overview of the Title V Operating Permit Program, in THE CLEAN AIR ACT HANDBOOK 444 (Robert J. Martineau & David P. Novello eds., 1998).
and detailed body of law the world has ever known; we have won the (dubious) distinction of representing the "state of the art" in legal complexity and detail. Hence, we are badly in need of works like The Clean Air Act Handbook to help us master the basics in our own field.

The complexity and detail typical of late 20th century environmental law in the United States far surpasses the limits of the individual human mind. It is said that Aristotle was the last human being who knew everything; implying, I think, not only that Aristotle was exceedingly intelligent, but also that as human knowledge continued to develop and expand, it exceeded the cognitive capacities of any human being — even an Aristotle. In the same vein, no one is really an "environmental lawyer" any more; we are air lawyers, or water lawyers, or Superfund lawyers. The field has simply gotten too large and complex for anyone to master it all.

Nowhere is this trend toward subspecialization within environmental law more evident than in the Office of General Counsel (OGC) at EPA. No one understands the details of a particular little corner of environmental law better than an EPA/OGC attorney, except perhaps former EPA/OGC attorneys now in private practice, like those who contributed to The Clean Air Act Handbook. This was first brought home to me soon after I became EPA General Counsel in 1989. Four EPA/OGC attorneys were briefing me about new proposals implementing section 304(l) of the Clean Water Act. As an academic, schooled in the principle of Dworkinian narrative consistency,17 I quite naturally asked if what they were telling me about section 304(l) fit together with what I had heard the day before about section 304(m). There was a momentary hesitation followed by an uneasy silence in the room as they looked from one to another. Finally, one of them said, we’re the section 304(l) team; if you want to know about section 304(m) you’ll have to call in another lawyer in the office.

Only at OGC do environmental lawyers have the luxury—and also the curse—of specializing not just in a particular statute, not just a particular statutory section, but in particular statutory subsections! No one understands the “details,” the particular legislative, regulatory and judicial history of particular environmental law programs in the depth that EPA/OGC attorneys do. Of course, like the heroes in Greek tragedy, that is both their heroic strength and also their fatal flaw.

17 See RONALD DWORKIN, LAW'S EMPIRE (1986).
Increasing complexity and detail in environmental law is not all bad. The most effective, advanced systems of environmental law worldwide—the Dutch, the German, the American, and perhaps the Japanese—share at least one essential, common characteristic; each of them features an institutional means of translating the high level political pronouncements of legislation ("thou shalt not pollute") into facility-specific, verifiable, quantitative limits on emissions that are enforceable. The systems differ widely in how they translate broad legislative goals ("law at the wholesale level") into specific, quantitative limits on technically-measurable emissions ("law at the retail level"), but they all have some effective means of doing so.

In contrast, environmental law systems around the world that are not effectively enforced (such as the Russian and Polish), often remain vague, unspecific hortatory commands. For this reason, I am generally unsympathetic with Professor David Schoenbrod's suggestion that the U.S. environmental statutes should be "rules" statutes, actually stating the "law

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18 See generally Colin S. Diver, The Optimal Precision of Administrative Rules, 93 YALE L.J. 65 (1983) (achieving the optimal degree of regulatory precision through tradeoffs between the values of transparency (understandability), accessibility (ease of application), and congruency with policy purposes and at the cost of great complexity).

19 Some systems of environmental law, like the Anglo-American common law system of nuisance, solve the information-cost problem of tailoring environmental law to particular situations by creating specificity ex post rather than ex ante. Thus, a common law system enunciates broad general principles like "reasonableness" through precedents and only translates them into facility-specific implications ex post through retroactive, case-by-case application. Common law economizes on the information costs of translating high-level pronouncements into facility-specific applications by only tailoring rules to particular situations reactively. See generally Bruce A. Ackerman, Reconstructing American Law (1984) (describing common law as "reactive" versus the "proactive" administrative state). Of course, individual lawyers advising their clients about common law requirements may also be viewed as part of the legal system and they may be asked to give specific advice. However, common law systems generally have far less information content in their official legal pronouncements to form the basis of lawyers' legal advice than do administrative regulatory systems, which strive to create greater specificity ex ante through detailed regulations and guidance documents. Depending on the structure of the background incentives—such as burden of proof, likelihood of enforcement, and magnitude of penalties, which determine the expected costs of errors in prediction in one direction as opposed to the other—the relative paucity of information in common law systems may either create broad deterrence and in terrorem effects, or under-enforcement due to vagueness. See generally E. Donald Elliott, Re-Inventing Defenses/Enforcing Standards: The Next Stage of the Tort Revolution?, 43 RUTGERS L. REV. 1069 (1991) (based on the Pfizer Distinguished Lecture in Tort Law on Nov. 29, 1990).
at the retail level" that applies to polluters. It would, I believe, far exceed the institutional capacity of Congress to devise enforceable pollution control rules that could apply to the vast variations in American industry. Thus, part of the genius of U.S. environmental law is the law-making apparatus that I described as an interpretative pyramid at the beginning of this Review—the conceptual pyramid contains high level congressional commands at the top, descending through informal rulemaking and guidance, to case-by-case administrative interpretations, down into state-level applications, and even into facility-specific implementing rules. This pyramidal structure piles levels of interpretation on top of one another to descend from high-level commands Schoenbrod’s "goals," to eventually translate them into very specific, enforceable requirements than can be inspected and enforced against individual polluters.

Another major source of complexity in U.S. environmental law is the search for political acceptability. In my experience, many, if not most, complex distinctions in environmental rules are the fossilized evidence of a past political deal. Typically, one interested stakeholder group gets the result it wanted most in a certain area, and another stakeholder group gets the result it wanted in another area, even if the two results are logically inconsistent (thus provoking the term "unholy compromise"). These stakeholders groups are not necessarily external to EPA, but often consist of offices or even informal groups within offices, that attach a high degree of importance to a particular policy in a particular area.

One of the great strategic insights of all time was Baron von Clausewitz’s theory that a numerically inferior force could defeat a numerically superior force by concentrating its efforts in a particular area of the line to create local superiority. In the same way, interest groups that lack sufficient force to globally prevail in efforts to get an entire rule rewritten to their liking can often can prevail by confining their demands to

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21 See Schoenbrod, supra note 20, at 767-68.


23 H. Rothfels, Clausewitz, in MAKERS OF MODERN STRATEGY: MILITARY THOUGHT FROM MACHIAVELLI TO HITLER 95, 108 (Edward Mead Earle, ed., 1971) (1943) (noting the importance of numerical superiority—"first generally, then at the decisive point").
the narrow issues that they care most about.24 As the process of public participation and input from interested groups takes place, EPA rules and interpretations typically become more and more complex; one group after another gets a little something here and a little something there, each winning small battles on issues that it cares about more than the other groups care to oppose. The optimal EPA rule from the standpoint of political acceptability is one in which there is a little something for everyone, not a simple, clear-cut victory on every issue for any one interest group or constituency.

In a sense, the complex lawmaking detailed in The Clean Air Act Handbook is the residue from thousands of ad hoc political compromises struck over the years.

IV. ENVIRONMENTAL LAW PUBLISHING IN THE INFORMATION AGE

The Clean Air Act Handbook has flaws, but by and large they are the flaws inherent in its genre; it is a technical treatise of a rapidly changing field. The book was outdated—or at least incomplete—on the day it was published, and it becomes more incomplete as EPA issues new interpretations and guidance documents. The importance of these on-going changes varies from area to area. Some of these changes can be easily anticipated. For example, Bernard Hawkins, author of the chapter "The New Source Review Program,"25 repeatedly refers to EPA's long-awaited New Source Review (NSR) Reform, which has been under discussion and development for several years. This comprehensive rewrite of EPA's approach to evaluating new sources under the Prevention of Significant Deterioration (PSD) program will modify, if not sweep away, many of the historical precedents so lovingly and carefully reviewed in The Clean Air Act Handbook. But just as Maitland reminded us that "[t]he forms of action we have buried, but they still rule us from their graves,"26 so too EPA's

24 See generally George J. Stigler, The Theory of Economic Regulation, 2 BELL J. ECON. 3 (1971) (arguing that under certain conditions special interests that can concentrate their resources on particular regulatory provisions may be successful in prevailing over more general interests).


historical precedents and interpretations have a way of exercising continuing influence long after they have allegedly been "reformed." Thus, most of what the chapters in *The Clean Air Act Handbook* teach us will continue to be relevant; the problem is that they are incomplete, and grow increasingly more so as time goes on.

Some of the changes were likely anticipated by the authors as they went to press in 1996. But others probably came as a surprise. For example, while the author of the NSR chapter could have foreseen NSR Reform, neither he nor anyone else could have foreseen EPA’s major new initiative to enforce the old PSD modification rules against the electric utility industry, at the same time that another part of the Agency is proposing to streamline and simplify them. Nor could he, or anyone else, have foreseen EPA’s recent proposal to eviscerate the “demand growth exclusion” for electric utilities that the Agency promulgated in 1992, following the decision in *Wisconsin Electric Power Co. v. Reilly*, as part of its post-WEPCO fix. Although *The Clean Air Act Handbook* carries a 1998 copyright date, if a lawyer in 1998 were to rely on the NSR chapter in advising an electric utility on what it may or may not do, his or her advice might be seriously off target.

Again, this is not so much a criticism of the authors, as it is of the medium—printed books. As an information transfer technology, it is difficult, if not impossible, for printed books to keep up with the ever-changing pattern of administrative interpretations and policy adjustments in an area such as the CAA. Even the traditional mechanism for updating

27 Hawkins, supra note 25, at 115.


29 "WEPCO" refers to a 1990 federal court of appeals decision that struck down what was EPA’s position at the time; that a "like kind" replacement of damaged equipment at an electric powerplant could trigger the PSD program’s requirements for "new" sources. *Wisconsin Electric Power Co. v. Reilly (WEPCO)*, 893 F.2d 901 (7th Cir. 1990). EPA responded with a series of new interpretations, including an exclusion for physical and operation changes in electric utility plants attributable to system growth in the demand for electricity. *Requirements for Preparation, Adoption and Submittal of Implementation Plans; Approval and Promulgation of Implementation Plans; Standards of Performance for New Stationary Sources*, 57 Fed. Reg. 32,314 (July 21, 1992); see Hawkins, supra note 25, at 98, 100, 115.

30 Lest I be misunderstood, I do not think that books are outdated. In fact, I lovingly collect books, particularly old books. Some things never change. For example, Erasmus’s observations on human folly are as relevant today as they were in 1550. But EPA’s interpretations of the Clean Air Act are not in this category, and the fast pace of changing administrative interpretations calls into question whether books as a medium are the most
printed works, the annual pocket part, is too slow to keep up with the need for "real time" advice on new regulatory developments.

To their credit, the authors implicitly recognized this shortcoming in their medium by reprinting, as an appendix to their book, an exceedingly useful chapter by Lee Hoffman.\(^3\) This piece describes how to access the on-line Web sites and bulletin boards maintained by EPA on which new guidance documents, preambles, and interpretations are posted by EPA on an almost daily basis. A second appendix contains a more comprehensive and up-to-date list of EPA and other Web sites of interest to the air practitioner.

One wishes *The Clean Air Act Handbook* had a similar form, as an interconnected series of expert Web sites. Then experts in rapidly developing subareas of law, like the authors of each of the chapters in *The Clean Air Act Handbook*, could charge a fee and update their work on an on-going "real time" basis as new developments emerge in the field. This is, in my opinion, the future of this kind of work.

It has long been said that the age of the great legal treatises is past. But the rise of the Internet\(^3\) creates a niche for a new kind of legal treatise, one that is continually updated as new developments emerge. It might even include "jumps" or "links" that automatically move the browser from a footnote citation of an EPA guidance document to the text of the cited document.

Thus, *The Clean Air Act Handbook* truly may be "The Last, Great Clean Air Act Book."

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32 For a general exploration of how the rise of the Internet will change administrative law, see Stephen M. Johnson, *The Internet Changes Everything: Revolutionizing Public Participation and Access to Government Information Through the Internet*, 50 ADMIN. L. REV. 277 (1998).