

NEXT GENERATION ENVIRONMENTAL COMPLIANCE AND ENFORCEMENT

by

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Editors

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About the Editors



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Introduction and Acknowledgements

This book follows from a December 2012 conference focused on Next Generation Environmental Compliance and Enforcement sponsored by the U.S. Environmental Protection Agency (EPA). The two-day conference was hosted and cosponsored by The George Washington University Law School. Other cosponsors included the Environmental Law Institute (ELI), the Center for Law, Energy and the Environment (CLEE) at the University of California, (UC) Berkeley Law School, and the Goldman School of Public Policy (GSPP) at UC Berkeley.

The conference brought together approximately 70 experts from business, academia, and government to explore ways that environmental compliance and enforcement are changing and the new tools available to make compliance and enforcement more effective. This book highlights some of the ideas and recommendations that were discussed at the conference. Following an introductory article from Cynthia Giles, the first several chapters focus on “bigger picture” issues with next generation compliance and enforcement. The remaining chapters then explore some specific techniques for enhancing the effectiveness of environmental compliance and enforcement.

The book opens with perspectives on next generation compliance from Cynthia Giles, Assistant Administrator for Enforcement and Compliance Assistance at the EPA. Her contribution is accompanied by an Appendix that provides details about new compliance approaches, with links to more detailed information on these techniques. Hari Osofsky and Hannah Wiseman then broaden the discussion on next generation Compliance and Enforcement by looking at how the gaps in enforcement authority that can occur in a federal system of governance might be addressed in the context of the rapidly growing energy sector. The chapter focuses on innovative governance models which could “address the environmental and social risks and fairness concerns associated with domestic production pressures” and also “serve as positive examples of next generation compliance mechanisms.”¹

Pautz and Rinfret turn to a discussion of how regulators interact with regulated facilities, focusing on state regulators. Their chapter examines the nature of this interaction to provide a more nuanced understanding of how

1 *Infra* at 25.

environmental compliance and enforcement programs actually function. They offer new terminology (precision-based and intention-based regulatory enforcement styles) to characterize the styles of the state environmental regulators in this study, and they find that the choice of regulatory style is largely driven by several factors: the state in which regulators work, media, time spent in the office, age of the regulators, and the level of trust that they have in a regulated facility. Rinfret and Pautz find that many regulators “ultimately embrace a mix of precision-based and intention-based enforcement styles” and conclude that this “bodes well for discussions of next-generation environmental policy and helps dispel the sometimes negative caricatures of front-line workers.”²

Glicksman and Earnhart explore the limited empirical evidence that bears on the question of the relative effectiveness of coercive and cooperative enforcement in the context of environmental law. They inquire “whether an environmental agency’s enforcement approach becomes more or less effective as the multiple dimensions of that approach move closer to full coercion or full cooperation,” focusing on enforcement of discharge limits contained in permits issued to point sources in the chemical industry under the federal Clean Water Act (CWA).³ Glicksman and Earnhart conclude that in the context they considered, more cooperation leads to better environmental management in some cases, yet in other cases more cooperation is no better than more coercion.

Paddock, recognizing that relying solely on deterrence-based enforcement of existing laws will not achieve the results needed to achieve sustainable outcomes, suggests the need for enforcement officials to leverage their time and authority to have an impact on the internal economic drivers that lead businesses to act in a more sustainable manner and on building societal values that support both compliance and beyond-compliance behavior. He notes that enforcement programs have, for some time, embraced efforts that are designed to prevent pollution, encourage the development of better environmental management systems, and promote environmental auditing, all of which can have an impact on internal economics and on values. But enforcement officials typically have not assessed the extent to which their programs can and should strategically take into account internal economics and societal values as part of the larger effort of environmental agencies to achieve sustainable outcomes. He suggests that enforcement officials should pay closer attention to these considerations.

2 *Infra* at 56.

3 *Infra* at 83.

Scanlan and Tai begin the focus on more specific next generation techniques. Their case study on urban stormwater management highlights the utility of adaptive management in situations where regulators need to understand and incorporate new scientific research into their management decisions. The authors discuss how scientific breakthroughs in bacterial genetics could significantly improve urban stormwater management, and explore the extent to which urban water managers are using this new monitoring method. The authors then proceed to identify the legal and technical barriers to a successful adaptive management regime in this context.

Snyder et al. discuss the relationship between advanced monitoring technologies and improved environmental compliance and enforcement in the context of air pollution. Their chapter describes how recent advances in monitoring technologies—such as the development of portable, lower-cost air pollution sensors—can support traditional air quality monitoring techniques. The chapter also discusses how these technologies can be used to empower citizens and communities by providing them with opportunities to monitor local air quality that can directly impact their daily lives. The authors conclude by highlighting a variety of initiatives undertaken by EPA to support the development and use of these new monitoring technologies.

Telesetsky looks at the role the insurance market could play in advancing compliance through the development of “mandatory, index-based environmental insurance products tied to third-party pollution monitoring technology.”⁴ She observes that in the past four decades, “a market for environmental insurance has emerged in response to government regulations” and that “[i]nsurers in these markets have begun to assume quasi-regulatory roles.”⁵ In particular, “some insurers have begun to demand higher level of care from their insured parties in response to avoidable environmental risks,” and have also “begun to offer insured parties technical support to further pollution reduction as well as mandating reviews of long-term project data for compliance.”⁶ Telesetsky concludes that as federal agency funds become more constrained from legislative inaction, the index insurance model offers a chance for enhancing private enforcement efforts to support federal government efforts. The model has the potential to generate a number of positive synergies: new business opportunities for reliable third-party verifiers of industry effluent and emissions, business opportunities for new insurance

4 *Infra* at 239.

5 *Infra* at 238.

6 *Infra* at 239.

products, and more resources for already pressured government compliance and enforcement programs.

Schieffelin, Stewart, Williams, Lara, and Howard explore Colorado's hazardous waste self-certification system. They note that, as a result of self-certification, compliance rates across the small quantity generator (SQG) sector have dramatically improved, supported by a rigorous statistical evaluation.⁷ They conclude that the self-certification program has attained very impressive compliance rate improvements in the SQG universe in Colorado over the last four years, and explore some of the reasons for this success.

Meerman and DeBree address the experience in the Netherlands with environmental compliance assurance that focuses on company compliance management systems. They observe that law enforcement was long driven by the principle: "trust is good, control is better." They note, however, that this enforcement approach has not been entirely successful: regulated entities are still frequently found to be in violation of laws and permit requirements, and meanwhile regulators are facing serious budget cuts in the province. Moreover, this approach "does not do justice to companies and people that pay attention to proper compliance with legal requirements."⁸ As an alternative, the authors recommend a tiered oversight mechanism that reduces the extent and nature of oversight based on the success of a company's compliance management system. This comports with the idea that "companies with a good record in compliance management deserve more trust."⁹

Yang and Zhang review the issue of environmental petitioning and public participation in environmental enforcement. They discuss the importance of the "environmental complaint mechanism"—a tool introduced by the Chinese government which allows citizens to report violations by pollution sources and to petition the government for appropriate action.¹⁰ A recently published study by the authors showed that the mechanism has been heavily used by China's public to voice its concerns and frustrations with environmental issues. Although the authors note that the effectiveness of this tool "remains unproven" and that its "structure and operation . . . suggest serious challenges for effecting change," they nonetheless find that the "complaint mechanism has become a critical outlet for civil society engagement

7 "In 2008, only 32% of the SQGs were in compliance with 100% of the regulatory requirements. In 2009 and 2010, this compliance rate had increased to 53% and 62%, respectively. By 2011, the compliance rate had increased to 84%." *Infra* at 259-60.

8 *Infra* at 302.

9 *Infra* at 302.

10 *Infra* at 314.

on the environment generally and on environmental compliance issues specifically.”¹¹

Finally, Mintz brings the book to a close by reminding readers of some of the lessons learned from past environmental compliance innovation efforts. He recommends that EPA revisit past enforcement techniques (such as using publicity as a tool to reward those who are in compliance and shame those who are not), and also consider a variety of “untapped resources and untried techniques” (such as Telesetsky’s recommended index-based environmental insurance). He also recommends that EPA develop “working relationships with experienced, past EPA enforcement personnel, academics, companies that are complying with environmental laws, insurance companies, and bloggers,” in order to improve the network of information and resources that EPA can use for compliance and enforcement purposes.

* * * * *

The chapters in this book reflect the wide variety of different ideas and recommendations that were discussed at the 2012 Next Generation Environmental Compliance and Enforcement conference. As such, we hope that this book will serve as a valuable tool for regulators, academics and other stakeholders. We would like to thank David Hindin and Catherine Tunis for their hard work on this event, as well as the other EPA staff who helped organize the conference. We also give special thanks to everyone at UC Berkeley and George Washington University Law School who assisted with the event, including Daniel Farber, Jayni Hein, Blas Perez Enriquez, and Rob Glicksman; as well as our colleagues at ELI, including Read Porter, John Cruden, Jim McElfish, Nancy Oliver, and Scott Schang. Finally, we would like to thank all of the participants, including both speakers and other attendees, for their invaluable contribution to this discussion.

11 *Infra* at 315.