## Preface and Acknowledgments

Business today clearly takes its environmental performance far more seriously than it did over the past several decades. Corporate managers increasingly understand that a positive environmental record matters to the public and to shareholders, and as a consequence many tout the green credentials of their companies whenever the opportunity presents itself. Industrial facilities seem to have been affected by these changes at least as much as have as other businesses; they are much more attentive than previously to the need to use cleaner methods of production, decrease manufacturing waste, improve energy efficiency, reduce greenhouse gas emissions, and incorporate sustainability goals into their operation. In this book we focus on one aspect of the corporate greening: the disclosure of information about toxic chemical releases that documents environmental performance and also meets public expectations for transparency and social responsibility.

In particular, we examine the federal Toxics Release Inventory (TRI) program to explore how industrial facilities around the country have tried to come clean in two interrelated ways. One is to disclose key information to the public about the management and release of toxic chemicals and the health and environmental risks they pose to surrounding communities. The other is to use that information to clean up or "green" their activities. We want to know how much the TRI program has achieved in both respects. How has the disclosure of such information made a difference within the community and state, and how has compliance with the TRI program affected company management of toxic chemicals? We also want to know how changes in the management of toxic chemicals have come about, that is, the mechanisms by which the collection and disclosure of information affects community and corporate decision making. And we want to know what the program's accomplishments say about the potential for information disclosure as an environmental policy strategy.

We focus on the TRI program because it is the premier example of what most observers refer to as a federal, nonregulatory environmental policy. The TRI imposes mandatory reporting requirements on affected facilities and in that respect it shares at least one characteristic of other environmental policies that are considered to be regulatory. Yet the program does not include the regulatory apparatus of command and control that accompanies conventional environmental policies such as the Clean Air Act and Clean Water Act. Because it is so different from environmental regulatory policies, the effects it has had since its adoption in 1986 speak to the broader question of how information disclosure might be used to achieve environmental goals at a time when confidence in conventional command-and-control regulation has weakened. Commentators and policy analysts across the political spectrum have called for consideration of a range of new approaches to environmental policy, from market incentives to flexible regulation. This ongoing debate highlights the need to learn more about how well present policies are working and what might be expected of new approaches that are widely endorsed today.

Relatively few studies offer solid evidence about the effectiveness, efficiency, or equity of either long-standing regulatory policies or the newer approaches so much discussed in the 1990s and 2000s. In the case of the TRI program, scholars have explored its origins, operations, and some of its impacts with considerable insight. Our purpose in this book is different. We are interested in the mechanisms through which the program affects industry and communities, and whether and how it has helped to reduce the release of toxic chemicals and their risks to communities across the nation.

We also use the TRI program as a lens through which we can examine the environmental performance dilemma faced by government and industry as both strive to make the industrial footprint consistent with long-term goals of sustainability. The dilemma is that with conventional command-and-control regulation, government and business may pursue strategies that deliver less than optimal results. Yet there are ways to create win-win solutions where environmental performance can be improved through the use of hybrid policies that combine regulation and information disclosure, among other policy tools.

The TRI data are not without some problems of reliability, as critics have long observed. Yet used cautiously, we believe that the TRI database provides a unique and valuable opportunity to examine and compare corporate environmental performance over time and across the range of

industrial facilities, and to ask whether and how the TRI spurs new environmental management strategies among government agencies, non-governmental organizations, corporations, and communities. We employ a diversity of quantitative and qualitative research methods to address these questions, including extensive analysis of the TRI database itself and consideration of both the quantity of chemical releases and the public health risks associated with those releases. We also surveyed a national sample of corporate TRI officials, federal and state government officials whose work includes oversight of the TRI program, and emergency management personnel at the community level whose responsibilities include at least some aspects of local chemical management. Finally we use integrative and illustrative case studies of facilities and communities across the nation to learn more about how changes in industrial operations work at the "street level," and the driving forces that bring them about.

Some of the findings we report here run counter to public understanding of how the TRI program or information disclosure works. Thus we believe the analysis has important implications for any attempt to redesign the TRI program itself or to consider other information disclosure policies. Information disclosure alone is not the panacea that many proponents of TRI-like programs assert it is. However, it is an important piece of a multiple-method approach to fostering safer and cleaner manufacturing. Our findings also illuminate specific paths that government and industry can take to achieve safer and cleaner industrial operations.

As we note at several points in the chapters that follow, we hope that others will choose to address with further research at least some of the questions that we explore in this book. To that end, we have made the full TRI database that we employ and all of our survey results available through the Data Preservation Alliance for the Social Sciences project of the Inter-University Consortium for Political and Social Research at the University of Michigan. For one year following publication of the book, we also will keep the Information Disclosure and Environmental Decision Making Web site at the University of Wisconsin-Green Bay active. All of the questionnaires, survey results, and the major papers that we have presented at scholarly and government meetings are archived at that site: www.uwgb.edu/idedm.

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