Barking up the Right Tree: Recent Progress in Focusing the Toxics Issue

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Applying law to the problem of toxic materials over the last two decades has been a frustrating business. As public concern has risen, the laws have been progressively toughened, but the actual degree of protection from toxic threats does not seem to have gone up accordingly. Instead, every step along the path of tougher laws has widened the gap between promise and performance. Massive public dissatisfaction has begun to set in, and new approaches to toxics management are becoming a political necessity. This comment identifies two important weaknesses in the current approach and points to recent examples in which each of these weaknesses is being overcome.

Toxics control is not an easy issue, either scientifically or politically, and some degree of failure is to be expected. However, at least some of the reasons for the current failure are artificial. Those who write and rewrite the laws of toxics control have used models that are structurally self-defeating in important ways, swimming upstream against the flow of powerful incentives. This is a fixable flaw. One recently enacted statute may be able to serve as a model for turning incentives to advantage, rather than having to fight against them.

At the conceptual level, rather than the level of legal structure, the toxics issue has also suffered from artificial constraint. The tendency has been to identify the problem as one of "hazardous wastes" and to focus discussion on the question, "What is the best thing to do with hazardous waste?" In this regard, some recent experience under the general rubric of source reduction may help to provide an alternative conceptual model, one that identifies a more tractable problem.

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^{1.} California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65) (codified at Cal. Health & Safety Code §§ 25249.5-25249.13 (West Supp. 1988). See infra note 2 and accompanying text.

Success in removing these artificial handicaps will certainly not cause the toxics problem to disappear. It may, however, allow for a clearer focus on the actual problem, and thus on the context in which new approaches should be evaluated.

Turning first to the question of incentives, Professor Russell's paper Economic Incentives in the Management of Hazardous Wastes offers guidance. In his critique of existing federal toxics laws. Professor Russell identifies "cheating" and the need for exhaustive monitoring as key flaws. These can be seen as symptoms of a larger, structural flaw and as implicit recognition of the powerful counter-incentive to successful operation of the present system. The incentive is obvious: to avoid entering the system in the first place, either by hiding known problems ("cheating") or by avoiding the discovery of a problem (the ostrich approach). Under statutes like the Resource Conservation and Recovery Act of 1984 (RCRA), both types of behavior are rewarded. Such statutes depend on extensive and complex sets of regulations to sift through the many potential chemicals and potential degrees of hazard, which must be agreed upon and turned into regulations before enforcement of the statute can take place. There is therefore an additional incentive to avoid the intended system of controls by delaying and obfuscating the regulatory process as long as possible. In the area of toxics, where science and law mix even more uneasily than usual, plausible excuses for delaying the regulatory process are easy to find. In short, the real-world incentives faced by a potential polluter are exactly opposite to what one might want: against voluntary compliance, against self-policing and against reaching an agreement on clear and enforceable rules.

Incentives to avoid and delay are not unique to the world of toxics, but they are exaggerated by the enormous number of individual situations potentially involved, covering a wide range of risks from the trivial to the lethal, and from the relatively poor funding and motivation of the official enforcement agencies. A perception of randomness and irrationality, stemming from these causes, tends to feed on itself and to give regulated industry even less incentive to advance the process of regulatory clarification, or to allow itself to be covered by the law until the process of regulatory definition is fully complete.

Ideally, recognizing that the best information about toxic releases and toxic exposures is likely to lie with the individual releaser or exposer, a system of toxics controls would have a strong incentive in favor of self-policing and in favor of voluntary preenforcement compliance. It would also have an incentive in favor of reaching closure on regulatory definitions and the mixed science/law issues that are crystallized in regulatory text (e.g., which chemicals are covered by the particular law and at which levels).

In November 1986, California voters enacted a law by direct ballot initiative, commonly known as Proposition 65, which was drafted with these incentive considerations in mind.² Although the first of Proposition 65's two new legal requirements went into effect only in early 1988, the effect of its new approach, which consciously reverses some of these incentives, is already being felt.

The new law limits itself to a defined list of particularly harmful chemicals, those "known to the state to cause cancer or reproductive toxicity" as determined by a panel of experts, and contains only two action provisions, both phrased in simple terms. The first is a prohibition on discharging a listed chemical into a drinking water source. The second is a warning requirement for exposures to the same listed chemicals. Enforcement is by the usual government prosecutors—but also by private citizen suits.

To the regulated firms that are subject to the law, citizen suits create at least a theoretical risk that all violations may be prosecuted, regardless of limitations in the capacity of government officials. The elements of an offense under the two action sections are also phrased in a way that makes citizen actions relatively easy to bring and prove (as opposed, for example, to citizen suit prosecutions under RCRA).⁸ Finally, successful citizen prosecutors receive twenty-five percent of any fines levied in the cases they bring.⁹ The citizen suit is therefore credible, and the incentive to

^{2.} Id. (enacted November 4, 1986 by voter initiative; approximately two to one margin in favor).

^{3.} Id. §§ 25249.5, 25249.6.

^{4.} Id. § 25249.8(b), (d).

^{5.} Id. § 25249.5.

^{6.} Id. § 25249.6.

^{7.} Id. § 25249.7(c), (d).

^{8.} For example, a plaintiff using RCRA must prove that the substance in question is a "hazardous waste" within the meaning of the statute and regulations, 42 U.S.C. § 6972 (1982 & Supp. III 1985), which, given the way in which the statute and regulations are written, can be a daunting and expensive chore. In contrast, Proposition 65 applies by its terms to a pre-published list of chemicals. The plaintiff need show only that the substance in question is on the official list.

^{9.} Cal. Health & Safety Code § 25192(a)(2) (West Supp. 1988).

avoid citizen suits through pre-enforcement compliance is considerable.

As with other toxics laws, the new California law contains terms that can be given more precise meaning through regulation (e.g., "clear and reasonable warning," "significant amount" of a listed chemical, "no significant risk" of carcinogenicity, etc.). Defining regulations are authorized. However, they are not mandatory. This apparent weakness in the statute in fact produces a very powerful effect: it means that the law will go into effect, and will be enforceable, whether regulations have been completed on time or not.

In addition, most of the key science/law issues to be solved by regulation, such as the identification of the "no significant risk" level below which a carcinogen is exempt from the law's coverage, are placed in an uncustomary location. Rather than being placed in one of the two action sections that define the offense under the law, they are placed in portions of the statute that provide for exemptions from prosecution. Thus, it is the regulated firm that needs to have detailed regulations in place, in order to know where safety from prosecution lies. This is the reverse of the standard drafting method. When terms that need regulatory specification are placed in the definition of the offense, as is usually done, it means in effect that prosecutors and citizen suit plaintiffs must wait until regulations are completed before they can bring enforcement actions.

The law has built-in grace periods to allow regulations to be written before any enforcement takes place.¹⁰ However, it goes into effect on a date certain for each chemical that has been listed and creates potential liability for users of each such chemical as of that date.

This combination of features has created a powerful, and perhaps unique, incentive in favor of prompt and thorough regulation on the part of all industries to which the law will apply. Their need for regulation is heightened by an additional element in the new law's drafting, which is that the burden of proof for establishing the conditions for exemption falls squarely on the defendant. Thus, the risk in court for the regulated entity is much greater if precise definitions and clear line-drawing are not achieved through regulation. With nothing but the bare words of the stat-

ute, a defendant faces a greater likelihood of failing to prove that the exemption requirement had been met.

This incentive device, built into the legal structure of Proposition 65, has already been remarkably productive. In the twelve months between the official listing of the first set of chemicals (twenty-nine in number) and the date on which the law's warning requirement took effect, the lead state agency for Proposition 65 regulation¹¹ managed to determine and set exemption levels for thirty-four specific chemicals, defining the exemption boundary in precise numerical terms (e.g., twenty micrograms/day for the carcinogen benzene). 12 This represents approximately twice as many determinations for specific chemicals as the federal government has managed in the last twelve years under the Toxic Substances Control Act (TSCA).13 Each such determination, of course, represents both shelter; and enforceability: below the line, a potential defendant has clear shelter; and above the line, a prosecutor (or citizen plaintiff) has a clear violation to pursue. For effective toxics regulation, the importance of these "bright lines" for individual chemicals cannot be overstated. Such determinations involve risk assessment and are mixed questions of science and policy judgment. It seems reasonable to conclude that the speed with which they are made is at least in part a function of the incentives for completion that are present in the governing statute.

By using a structure that reverses some of the prevailing disincentives to enforcement, laws that impose mandatory controls on toxic chemicals can be made more effective. However, mandatory control is not the only policy tool available. Discussions of legal control tactics, including the foregoing, have a tendency to divert attention from the fundamental policy question, "What is the desired result?" Most of the national policy debate in the area of toxics management has tended to assume that the problem is one of "hazardous waste"; that waste in relatively constant proportion

^{11.} California Health and Welfare Agency.

^{12.} See Cal. Code of Regulations §§ 12709(b), 12711(a)(2), 12805(b). By statute, the exemption levels are required to be set at the level representing "no significant risk" for carcinogens (assuming lifetime exposure at the level in question), and at one one-thousandth of the "no observable effect" level for reproductive toxins. Cal. Health & Safety Code § 25249.10(c).

^{13.} Experience under analogous provisions of other federal toxic control laws is comparable. See, e.g., Clean Air Act, 42 U.S.C. § 7412 (1982) (toxic air contaminants); Safe Drinking Water Act, 42 U.S.C. § 300g-1 (1982) (maximum contaminant levels).

to output is a necessary by-product of a healthy economy; and that therefore the policy issue is, "Where should the wastes go?" The analogy to the energy crisis of the 1970's, by now much repeated, is still telling. Then, with energy supply considered to be one of the decade's main concerns, the assumption was that consuming barrels of oil or millions of kilowatt hours, in relatively fixed proportion to output, was an essential element of economic health, and that therefore the issue was, "Where do we get more energy?" In reality, the relationship between energy consumption and productivity is far from immutable, and it was discovered that efficiency increases (i.e., energy conservation) were a highly accessible, and highly cost-effective, form of solution.

In the area of toxics, there is a similar fallacy in the assumption of a fixed relationship between output and waste generation. The potential for reducing the amount of waste per unit output, through increased efficiency, appears to be equally great. The most common term for such measures is "source reduction." Only since mid-1986, with the publication of reports by the Office of Technology Assessment (OTA)14 and the Environmental Protection Agency (EPA)15 as well as several private groups, has source reduction begun to receive any significant policy attention. And, despite some window dressing, it is fair to say that federal laws governing toxics are essentially blind to source reduction and its implications. The habit of thinking only in "disposal" or "control" terms is hard to break. Professor Russell's paper is commendable in focusing squarely on the issue of economic incentives. However, even his enlightened discussion looks at incentives only in the context of proper disposal of spent or waste chemicals; it ignores the potential use of incentives as stimuli to reducing waste generation at the source. For example, the deposit-refund (DR) system he proposes would create a financial incentive to dispose of hazardous wastes properly, but the same system could also create a financial disincentive for source reduction.

A recent review of source reduction efforts by twenty state governments (where far more progress has been made than at the federal level) found that existing source reduction strategies

^{14.} OFFICE OF TECHNOLOGY ASSESSMENT, U.S. CONGRESS, SERIOUS REDUCTION OF HAZARDOUS WASTE FOR POLLUTION PREVENTION AND INDUSTRIAL EFICIENCY (1986).

^{15.} U.S. EPA, CASE PUB. NO. EPA 530-SW-86-033, REPORT TO CONGRESS: THE MINIMIZATION OF HAZARDOUS WASTE (1986).

rarely rely on the adaptation of command-and-control laws and that direct control strategies were not likely to be effective. A program with multiple elements, including education, technical assistance, financial incentives and regulatory accommodation, integrated into a coherent whole, was deemed to be essential in order to realize source reduction goals. The study, like OTA's and EPA's, also stressed the need for hard data which are unfortunately not available from the information collected under traditional hazardous waste regulation.

In short, myopia about the ends of toxics policy has kept source reduction from being an important policy element to date, and myopia about the means for pursuing it could artificially restrict its potential even as it begins to draw policy attention. EPA, for example, appears in its report to Congress to assume that source reduction would necessarily involve the creation and enforcement of command-and-control rules. The EPA report rejects the idea of a major federal role in source reduction, primarily on the ground that command-and-control activity would be premature.¹⁷ Source reduction appears to call for a different conceptual approach from the one reflected in EPA's report, and to require conceptual re-thinking of traditional toxics control mechanisms (including the major federal toxics laws) if its advantages are to be realized.

Again, recent experience offers some indication of how source reduction might be pursued. Recognizing that the absence of reliable technical and economic data is a key barrier to the development of rational source reduction policy, a surprising partnership in southern California has begun an \$800,000 research project to provide detailed information on specific source reduction measures and to show the potential impact of such measures, in quantified terms, on the relevant waste streams for a large urban area. The two partners in this enterprise are the Environmental Defense Fund, Inc. (EDF) and the Metropolitan Water District

^{16.} Environmental Defense Fund, Inc., Approaches to Source Reduction: Practical Guidance from Existing Policies and Programs (1986), reprinted in Approaches to Source Reduction of Hazardous Waste (California Institute of Public Affairs, Claremont Colleges) (the report includes an extensive list of state officials active in the source reduction area at 92-103).

^{17.} U.S. EPA, CASE PUB. NO. EPA 530-SW-86-033 REPORT TO CONGRESS: THE MINIMIZATION OF HAZARDOUS WASTE (1986).

(MWD) of Southern California, which is one of the nation's largest municipal water suppliers and which has no current role in toxic chemical policy or toxics control law enforcement. Their joint project, targeted at a study area within Metropolitan's service district in the greater Los Angeles area, is the most ambitious field study of source reduction potentials in the United States. The partnership is surprising not only for its level of commitment but also for its make-up: in the words of a Los Angeles Times headline, the two groups are "Old Enemies" on some of California's most conspicuous and politically sensitive environmental issues. 18 Their joint endeavor is therefore strong evidence of the benefit that these parties perceive in developing hard data on source reduction.

The willingness to work together on the part of entities as disparate as EDF and MWD is a sign of the potential attractiveness of the source reduction approach and the degree to which it might recast the toxics debate, in political terms as well as in physical/chemical outlook. At the same time, the experience with traditional toxics regulators to date shows how difficult it is, particularly at the federal level, to understand and integrate a toxics management concept that departs from the command-and-control model. The field of toxics is ripe, perhaps even desperate, for new approaches.

The two examples of new approaches that are offered in this paper are meant to suggest that the range of options for improved management and control of toxic chemicals is wider than usually supposed. Proposition 65 demonstrates that innovation in the design of toxics control laws can have major effect in resolving issues of scientific and policy debate and accelerating the transition to enforceable law. More broadly, it suggests the importance of recognizing and using the incentives that are built into the structure of a toxics law, rather than taking counter-incentives for granted and merely trying to overcome them through regulatory effort. The EDF/MWD partnership illustrates the power of a source reduction approach to generate new consensus—and new initiative—in working toward a long-term solution of the toxics management problem. As other new approaches to toxics management emerge, prompted by public frustration over the record of the last two decades, these examples may provide a

^{18.} Los Angeles Times, Dec. 2, 1986, at B1, col. 2.

useful benchmark for comparison and a reminder that at least some of the structural and conceptual limitations in current law can be overcome.