California's Community Right-to-Know

Edward G. Black

Follow this and additional works at: http://scholarship.law.berkeley.edu/elq

Recommended Citation
Available at: http://scholarship.law.berkeley.edu/elq/vol16/iss4/4

Link to publisher version (DOI)
http://dx.doi.org/https://doi.org/10.15779/Z38F83S

This Article is brought to you for free and open access by the Law Journals and Related Materials at Berkeley Law Scholarship Repository. It has been accepted for inclusion in Ecology Law Quarterly by an authorized administrator of Berkeley Law Scholarship Repository. For more information, please contact jcer@law.berkeley.edu.
California's Community Right-to-Know

Edward G. Black*

INTRODUCTION

Since 1984 many right-to-know laws have been passed at the federal, state, and local levels with the twin goals of informing the public about hazardous materials and helping citizens, businesses, and government officials develop safety regulations and emergency response plans to deal with these materials. Full implementation of the laws began in 1988. In general, the rules require businesses to report how and when they handle hazardous materials. In California, the community right-to-know system has become a regulatory industry, involving thousands of businesses and perhaps millions of dollars.¹

Given the paucity of public information about hazardous materials prior to the implementation of the community right-to-know program, a right-to-know system of some kind was desirable. California's community right-to-know system has addressed this need, but it has a number of shortcomings. Compliance with the reporting requirements has been poor, and efficient use of the information has been hindered by confused and conflicting implementation of the right-to-know rules. Moreover, the emergence of a bureaucratic system administered by specialists may be diminishing public participation in a system originally proposed to foster community involvement.

This Comment reviews the community right-to-know system that has been implemented in California. Part I offers a brief political history of the community right-to-know system and the purposes it was enacted to serve. Part II describes the federal, state, and local rules that have established and structured California's community right-to-know system. Part III assesses the system's early performance. This Comment concludes by examining the evolution of community right-to-know from a grassroots political movement to a specialized profession. It suggests that while this evolution has achieved a certain amount of uniformity and efficiency, it has also, perhaps unnecessarily, sacrificed public awareness of and involvement in the community right-to-know system.

¹. This Comment relies heavily on interviews the author conducted in the spring of 1989. Readers should assume that otherwise unattributed facts about the community right-to-know laws are based on interview notes.
Hazardous materials pose a substantial and growing health threat. It has been estimated that over 70,000 processed or synthetic chemicals are in commercial use and that an additional 1,000 chemicals are introduced to commercial use each year. Moreover, the production and consumption of these materials has risen significantly over the last forty years. The production of the top fifty synthetic organic chemicals now exceeds 172 billion pounds per year. The increase in chemical production and use has led to an increase in injuries caused by exposure to hazardous chemicals. In California, from 1974 to 1984, the number of disabling injuries and illnesses caused by exposure to chemicals reported to California's Worker's Compensation program doubled from roughly 4,000 to roughly 8,000.

The community right-to-know system emerged as a legislative response to this health threat. However, different political groups perceived the problem of hazardous materials in different ways. As a consequence, the right-to-know rules were drafted to serve many different purposes simultaneously.

First, and most directly, hazardous materials specialists perceived a dramatic imbalance in hazardous materials regulation prior to the passage of right-to-know laws. For example, in 1985, Ron Griffith, Chief of Orange County's Hazardous Materials Program, noted, "it's one of the real ironies to a lot of us in this business that [hazardous] waste materials are controlled a lot more stringently than [hazardous] raw materials, when in a lot of cases the raw materials are at least as dangerous or more dangerous than wastes."

Firefighters and emergency response personnel hold views similar to those of regulatory experts, but the firefighters' perspective is heavily influenced by concern for their own safety. With the growing presence of hazardous materials, firefighters and emergency response personnel were concerned about their own safety. 

---

3. Id.
6. Murphy & Taylor, supra note 5, at 1, col. 1, 24, col. 1.
confronted with more fires and other emergencies involving hazardous chemicals. In 1984, for example, there were over 1,194 fires involving toxic chemicals in California. Confronted with unknown and potentially life-threatening toxic fires, emergency response personnel were often forced to let buildings burn, evacuate entire communities, or take other drastic measures to protect themselves and others from possible death and injuries from fumes of burning toxics.

Over the last nine years, the public too has perceived a growing threat from hazardous materials. In 1980, media reports of the hazardous waste disasters at Love Canal, New York, and Times Beach, Missouri, sensitized the public to the dangers posed by hazardous wastes. Thereafter, citizens groups across the nation began to push Congress to pass the Superfund toxics cleanup program. Not long after Love Canal, residents living near petroleum refineries and chemical manufacturing plants in Contra Costa County, California, organized to force local industries to disclose what chemicals were manufactured, stored, used, and disposed of on local properties. "If industry won't tell us which chemicals they use," one county resident said, "then it makes you feel that the chemicals must be very dangerous." This sentiment fueled the community right-to-know movement.

Against this background of public concern and suspicion, the disastrous release of toxic gases at Union Carbide's chemical manufacturing plant in Bhopal, India, only heightened public awareness. Specifically, attention focused on the need for public regulation of the internal operations of facilities handling hazardous materials and the development of plans for responding to accidental releases of dangerous chemicals. By some accounts, the Bhopal disaster was single-handedly responsible for

7. Id. at 24, col. 1.

8. A fire at a chemical plant in Anaheim required the evacuation of 7,500 nearby residents because firefighters, who were uncertain as to what chemicals might be burning, feared a potential disaster. The mayor of Anaheim, Don Roth, said, "I believe very strongly that we should know where the hell these bombs [i.e. the chemicals] are." Id. at 1, col. 1. Additionally, without specific information on the nature of the chemicals involved, emergency response personnel were often unable to take any action. For example, although some burning chemicals can only be extinguished with water, other burning chemicals explode if mixed with water. Grier, Toxic Problems Stir Public Pressures for Right to Know Laws, Christian Sci. Monitor, Dec. 18, 1984, at 1, col. 4, 6, col. 1 (interviewing Spencer Black, Sierra Club lobbyist).

9. A number of environmental activists have described how Love Canal pulled them out of political apathy. Verhorek, After 10 Years, the Trauma of Love Canal Continues, N.Y. Times, Aug. 5, 1988, at B1, col. 2 ("I was Betty Crocker living on 99th Street. Then Love Canal hit, and if you get a meal at my house, you're lucky... Somebody has to watchdog [the polluters].").


12. Id.
initiating the political movement in support of community right-to-know laws.13 One early EPA pamphlet responds to the question, “Why a new law?” with a simple, almost mythical story that begins, “On December 4, 1984, a cloud of methyl isocyanate gas, an extremely toxic chemical, escaped from a Union Carbide plant in Bhopal, India.”14

With the help of grassroots environmental activists, public awareness of hazardous materials and distrust of private chemical-handling companies were shaped into a political movement that aimed for both public regulation of hazardous materials and public participation in the regulatory process.15 Fred Millar, Director of the Toxic Chemicals, Safety and Health Project at the Environmental Policy Institute in Washington, D.C., called for right-to-know legislation that would “democratize” the use of hazardous materials by private businesses.16

Less publicly, environmental activists recognized that information gathered from those who use, handle, or store hazardous chemicals could be used to push for more public involvement. Margot Rosenberg, a member of the legislative committee that drafted Berkeley, California’s community right-to-know ordinance, explained that: “From the start we realized that public disclosure of information about hazardous materials would help environmental groups build a grassroots consensus for regulating the commercial use of hazardous materials.”17 As community right-to-know laws were legislated at the federal, state, and local levels, even representatives of the chemical-manufacturing industry believed that the community right-to-know movement had “the potential to reshape the regulatory and legislative debate over environmental health and safety issues.”18

Politicians responded to the concerns of environmental activists and the public by enacting a community right-to-know system designed to keep the public informed and involved. Public disclosure of most re-
ported information is mandatory, and local regulatory commissions responsible for administering much of the right-to-know program are required to include concerned citizens from business, the community, and environmental groups.

II  
CALIFORNIA'S COMMUNITY RIGHT-TO-KNOW SYSTEM

California's community right-to-know system is built with legal materials drawn from the federal, state, and local levels. At the federal level, the Emergency Planning Community Right-to-Know Act (EPCRA) establishes a minimum community right-to-know system. It expressly provides that state and local law may heighten EPCRA standards. In California, both state and local governments have accepted EPCRA's invitation to legislate locally. Chapter 6.95 of the California Health and Safety Code heightens federal reporting requirements and toughens emergency-planning requirements. Similarly, many cities and counties in California have supplemented both federal and state requirements. Although they vary widely, these local laws are often particularly important because they may impose the most stringent compliance requirements. To provide a comprehensive survey of the entire right-to-know structure, this Comment supplements the discussion of the federal and state rules with one particularly stringent local law, the City of Berkeley's Hazardous Materials Disclosure Ordinance.

The discussion that follows examines the right-to-know system established by these federal, state, and local laws. First, it sets out the requirements of these laws, noting how the system gathers relevant information. Second, it reviews the process through which this information is dispersed to the general public and used to develop emergency response plans.

A. Information Gathering Through Reports

California's community right-to-know system begins with reports from manufacturers and commercial handlers of hazardous materials. At the federal level, hazardous materials reports are required by sections

22. EPCRA § 302(b)(2), 42 U.S.C § 11002(b)(2). See also Utroska, supra note 5, at 17, col. 2 (citing interview with Andrew Waldo, representative of the Synthetic Organic Chemicals Manufacturers Association).
23. See infra text accompanying notes 76-115 (reporting requirements), 132-57 (planning requirements).
24. See infra notes 233-36 and accompanying text.
302, 304, 311, 312, and 313 of EPCRA.\textsuperscript{25} Both California law\textsuperscript{26} and the Berkeley ordinance\textsuperscript{27} also require community right-to-know reports.

All three of the reporting systems follow a four-step structure. First, they identify who is responsible for gathering information and providing reports.\textsuperscript{28} Second, they provide standards for identifying the hazardous materials that must be reported.\textsuperscript{29} Third, they describe the mechanics of reporting, such as when the duty to report begins and what each report must contain.\textsuperscript{30} Finally, they provide for enforcement and liability for noncompliance.\textsuperscript{31}

1. **Placing the Burden of Reporting**

Hazardous materials are prevalent throughout all areas of the economy;\textsuperscript{32} the chemical companies that manufacture hazardous materials are only one source. Once the hazardous materials are manufactured, they are used to make, package, and transport other products. Many hazardous materials are sold directly to consumers in the form of solvents, pesticides, and petroleum-based fuels used for household purposes. Government agencies, especially the military, use hazardous materials in manufacturing, cleaning, and transportation. In addition, people are exposed to hazardous materials each time those materials are transported by truck or rail through their community.

The dispersion of hazardous materials posed a fundamental problem for the community-right-to-know system. Truly comprehensive reporting would have placed a massive compliance burden on the public and could have swamped government administrators with more information than they could handle within their budgets. A burden-spreading compromise of some kind was required. In general, the writers of the federal, state, and local laws have made this compromise by requiring reporting only from "businesses." Berkeley's Hazardous Materials Disclosure Ordinance is a good example.

\begin{itemize}
\item \textsuperscript{26} CAL. HEALTH & SAFETY CODE §§ 25500-25545 (Deering 1988 & Supp. 1989).
\item \textsuperscript{27} BERKELEY, CA., MUNICIPAL CODE § 11.52 (1986) [hereinafter B.M.C.].
\item \textsuperscript{28} EPCRA § 301, 42 U.S.C. § 11001 (Supp. V 1987); CAL. HEALTH & SAFETY CODE § 25502 (Deering 1988); B.M.C. §§ 11.52.040, 11.52.140-.150 (1986).
\item \textsuperscript{31} EPCRA §§ 325, 326, 42 U.S.C. §§ 11045, 11046 (Supp. V 1987); CAL. HEALTH & SAFETY CODE §§ 22514-22516 (Deering 1988); B.M.C. § 11.52.090 (1986).
\item \textsuperscript{32} See generally S. Sherry & R. Purrin, supra note 2, at 90-93, app. A (listing common hazardous substances, including both solvents and gasoline, and their health effects).
\end{itemize}
The Berkeley ordinance places the burden of reporting exclusively on “businesses” and does not mention transportation facilities, government agencies, or consumers. The statutory definition of business in the Berkeley ordinance is extremely broad. In practice, however, Berkeley enforcement personnel have ignored the statute’s broad scope and, relying on their own conventional concepts of “business,” limited enforcement to businesses holding a business license and organizations operating in Berkeley’s business district.

The federal and state right-to-know rules also limit the burden of reporting to businesses. California’s community right-to-know system uses a two-track structure, requiring more rigorous reporting and planning requirements for “acutely hazardous materials” than for “hazardous materials.” Both tracks have reporting requirements and both place the burden of reporting on “businesses.” In addition, both tracks define “business” with broad statutory language identical to that used by the Berkeley ordinance. As a practical matter enforcement of the state law has been limited to only certain businesses. State law does make one exception to the business-only rule by extending reporting requirements to state-sponsored educational institutions such as the University of California.

Federal community right-to-know reporting requirements are scattered across five sections of EPCRA and three parts of the Code of Federal Regulations. While these reporting provisions vary in many respects, they all place the burden of reporting on businesses. However,

33. B.M.C. § 11.52.040 (1986).
34. The ordinance defines “business” as “an employer, self-employed individual, trust, firm, joint stock company, corporation, partnership, [or] association. A business shall include both for-profit and non-profit businesses.” Id. § 11.52.020(A). Taken to the extreme, the definition would seem to embrace residences employing household cleaners or gardeners who might use solvents or pesticides in their work. Interview with Bob Steele, Captain, Hazardous Materials Response Team, Fire Department, City of Berkeley, in Berkeley, California (Mar. 19, 1989) [hereinafter Steele Interview].
35. Steele Interview, supra note 34.
37. Id. §§ 25533, 25505.
38. Id. §§ 25533, 25503.5.
39. Compare id. § 25501(c) (defining “business” as “an employer, self-employed individual, trust, firm, joint stock company, corporation, partnership, or association. For the purposes of this chapter, ‘business’ includes a business organized for profit and a nonprofit business”) with B.M.C. § 11.52.020(A) (1986), supra note 34, (using identical language).
40. CAL. HEALTH & SAFETY CODE § 25501.4 (Deering Supp. 1989). It is noteworthy, however, that these education institutions were initially excused from reporting, that they were only required to report by a special legislative amendment, and that they have been given until 1992 to comply with all state and local reporting requirements. Id. State-sponsored educational facilities were added by California Assembly Bill 2189. 1988 Cal. Stat. 1585 § 2.
they do not use the term "businesses" to identify those entities required to report. Unlike the California and Berkeley rules, the federal laws place the burden of reporting on "facilities." As defined in the implementing regulations, "facility" broadly encompasses any structures on contiguous properties owned or operated by the same person.

This difference in terminology, however, is of no practical consequence. EPCRA sections 311 and 312 apply only to "facilities," which are otherwise required by the Occupational Safety and Health Administration (OSHA) to provide hazardous materials information to workers. As EPA explains, these OSHA regulations apply only to private commercial manufacturers and processors. EPCRA section 313 places the reporting burden only on "facilities" that both employ ten or more full-time employees and have Standard Industrial Classifications (SIC's) clearly identifying them as commercial manufacturers.

Sections 302 and 304 also limit reporting to businesses, but in a less obvious way. Instead of stating that only certain people possessing hazardous materials must report, section 302's implementing regulations state that hazardous chemicals will be considered hazardous, and thus trigger a duty to report, only when certain people possess them. Consumers, farmers, and research facilities thus need not report because the chemicals in their possession are by definition not hazardous. However, private manufacturers, processors, and vendors of the same materials must comply with the reporting requirements. EPA officials have found that the reporting systems set up by both Berkeley and California generally meet and exceed the reporting requirements of sections 302 and 304.

2. Identifying Hazardous Materials

After identifying who should report, federal, state, and local laws identify which hazardous materials trigger a duty to report if possessed,

49. Id.
used, or released. The Berkeley ordinance is again a good illustration of how this process works. It places a greater emphasis on comprehensive reporting of hazardous materials than the state or federal rules and adopts the most comprehensive and explicit set of standards for reportable hazards.

After dividing the universe of hazardous materials into "wastes" and nonwaste "substances," the Berkeley ordinance adopts three standards for determining what materials are hazardous. First, the ordinance uses what is commonly called a performance standard, but what might be more accurately referred to as a foreseeability standard. Any substance "[w]hich is known by the business in which it is found to present a significant risk of [harm] . . . as a result of foreseeable use [or] handling" shall be considered a hazardous substance that may ultimately be the subject of a right-to-know report. The ordinance adopts a similar standard with reference to hazardous wastes. However, businesses are not required to conduct original research to determine whether or not a material is hazardous.

In addition to the general performance standard for hazardous materials, the Berkeley ordinance also utilizes a nominal, or list, standard. Under the nominal standard, any material that appears on certain lists is a hazardous material that triggers a duty to report. In particular, the Berkeley ordinance adopts by reference: (1) the list of carcinogenic substances identified by the International Agency for Cancer Research; (2) the list of carcinogenic substances identified by the National Toxicology Program; (3) the list of "reproductive toxins" given in the appendix to the current edition of Nesbit, Karch, and Noyes' *Chemical Hazards of Human Reproduction*; and (4) a list of materials that are designated after public hearings as hazardous by Berkeley's Chief of Environmental Health.

52. Id. §§ 11.52.020(J)(3), 11.52.040(A) (emphasis added).
53. The performance standard for hazardous wastes is created by incorporating performance standards already promulgated into law at the state level. Id. § 11.52.020(K). The incorporated state standards read as follows: "'Extremely hazardous waste' means any hazardous waste . . . which, if human exposure should occur, may likely result in death, disabling personal injury . . . [or other harms.]" *Cal. Health & Safety Code* § 25115 (Deering 1988).
55. Id. § 11.52.030.
56. Id. § 11.52.020(B)(1).
57. Id. § 11.52.020(B)(2).
58. Id. § 11.52.020(N).
59. Id. § 11.52.030(A).
Finally, the Berkeley ordinance also includes within the definition of “hazardous materials” all materials identified by an incorporative standard. Here, the ordinance looks to other governmental agencies operating right-to-know systems and incorporates by reference any materials that the other agencies determine are hazardous and worthy of reporting. Of course, the agencies from which these definitions derive typically define hazardous materials using performance standards, lists, and other incorporations of their own.

Such incorporative standards usually amount to an expansion of the performance standards and lists already identified elsewhere in the code. For example, the Berkeley ordinance incorporates as hazardous any material for which a Material Safety Data Sheet (MSDS) must be developed under worker right-to-know programs promulgated at the federal and state level. The combination of Berkeley’s standard with those of the federal and state systems results in a broad definition of the term “haz-

60. Id. § 11.52.030(J)(1), (2).
61. See infra note 62.

While a number of federal laws now require MSDS reporting, virtually all of these laws require such reporting only where an employer is required to draft an MSDS as part of OSHA’s “hazard communication” program. 29 C.F.R. § 1910.1200 (1988).


Fed-OSHA’s hazard communication system divides hazardous materials into “physical hazards” and “health hazards,” both of which are defined by a performance standard. Id. § 1910.1200 (c). Physical hazards include any chemical “for which there is scientifically valid evidence that it is a combustible liquid, a compressed gas, explosive, flammable, an organic peroxide, an oxidizer, pyrophoric, unstable (reactive) or water-reactive.” Id. Health hazards include any chemical “for which there is statistically significant evidence based on at least one study conducted in accordance with established scientific principles that acute or chronic health effects may occur in exposed employees.” Id. Fed-OSHA provides a detailed and highly technical discussion of what scientific evidence will be accepted as establishing a health risk. Id. § 1910.1200 apps. A, B, C. These appendices include the appearance of a chemical on certain lists or the identification of a material as hazardous by certain other agencies as sufficient evidence of a health risk. Id. Thus, fed-OSHA’s performance standard embraces nominal and incorporative standards.
ardous materials." This definition is constantly changed by the decisions of the experts and government agencies whose lists and standards are incorporated into Berkeley's ordinance.

State and federal laws have adopted definitions of hazardous materials that are not as comprehensive as the Berkeley ordinance, but which are quite substantial nonetheless. California's two-track community right-to-know reporting system begins with a performance or feasibility standard: " 'Hazardous material' means any material that . . . poses a significant present or potential hazard to human health and safety or to the environment if released." California then incorporates: (1) materials designated as radioactive hazards by the Nuclear Regulatory Commission; (2) materials designated as hazardous by the federal Department of Transportation; (3) any material for which the manufacturer or processor is required to prepare an MSDS under workplace safety programs overseen by state and federal OSHA officials; (4) substances designated as "restricted" by the Director of the State Department of Food and Agriculture; (5) all substances designated as hazardous by EPA under certain provisions of the Clean Air and Water Acts; and (6) for "acutely hazardous" reporting only, all materials designated "extremely hazardous" by EPA acting under EPCRA.

As noted previously, the federal rules calling for right-to-know reporting are scattered across five sections of EPCRA and are implemented separately in three parts of the Code of Federal Regulations. The EPCRA sections in each of the three C.F.R. parts have been implemented with a different standard for identifying hazardous materials.

Sections 302, 311, and 312 of EPCRA incorporate by reference the standard for hazardous materials promulgated by OSHA to administer OSHA's worker right-to-know program. The OSHA standard, in turn,
includes performance standards, lists, and an incorporation of standards promulgated by other agencies. Section 302 calls on EPA to create a new list of “Extremely Hazardous Substances.” Finally, section 313 requires reporting for all chemicals placed on a list of “Specific Toxic Chemicals.”

3. The Mechanics of Reporting

After determining who must report what substances, community right-to-know laws specify what the reports must contain. Federal, state, and local laws all require reporting when the party responsible for the report either possesses a certain amount of a hazardous material, or releases a certain amount of hazardous material into the environment. However, all of the laws vary slightly as to how much of which materials must be possessed or released in order to trigger a duty to report.

EPCRA sets out four reporting requirements triggered by the possession of hazardous materials and one reporting requirement triggered by the release of hazardous materials into the environment. Section 302 establishes an “emergency planning notifications” requirement that obligates any responsible party possessing more than a “threshold planning quantity” of listed hazardous materials to submit a report to local emergency response officials identifying the presence of the materials as well as their amounts.

Sections 311 and 312 of EPCRA establish what is known as “MSDS and Inventory Reporting.” Under these sections, any manufacturer or processor of a hazardous material must submit an MSDS and an inven-

73. See supra note 62.
75. Id. § 313, 42 U.S.C. § 11023 (regulations pertaining to “Specific Toxic Chemicals” list at 40 C.F.R. § 372.65 (1988)).
76. See infra notes 109-10 and accompanying text.
78. Id. Different threshold quantities have been established for each chemical. 40 C.F.R. § 355 app. A (1988). In calculating the total quantity of hazardous materials on the premises, a reporting party must also take into account the amount of hazardous material contained in mixtures and solutions. Id. § 355.30(2)(iii)-(iv).
80. See supra note 62 and accompanying text. An MSDS is a hazard information form first developed by OSHA. It amounts to an almanac description for a particular hazardous material. In order to meet the requirements of section 311, an MSDS should include: (1) “Product Identification,” including the common chemical name, other names or identifying numbers, and the manufacturer; (2) “Hazardous Ingredients,” including material identification information for all hazardous ingredients and the exposure levels at which human health risks are created; (3) “Physical Data,” including the boiling point, vapor pressure, vapor density, water solubility, appearance and odor, specific gravity, percentage volatiles, and evaporation rate; (4) “Fire and Explosion Data,” including information on how the material should be
tory information form to local emergency response officials if: (1) they are already required to prepare an MSDS under OSHA's worker right-to-know program, and (2) they possess more than the threshold reporting quantity. For materials defined as hazardous by OSHA's MSDS program, the threshold quantity is 10,000 pounds. For materials defined as extremely hazardous under EPCRA section 302, the threshold quantity is 500 pounds or section 302's "threshold planning quantity," whichever is less. Once again, the amount of hazardous material present as an ingredient in a mixture must be included when calculating the total quantity of material for reporting purposes.

The fourth reporting requirement is EPCRA section 313. Although this is sometimes referred to as "release reporting," the duty to report is triggered by the possession, not the release, of hazardous materials. Any covered business must fill out an EPA "Form R" if it manufactures or processes more than 25,000 pounds, or uses more than 10,000 pounds of a hazardous material handled if ignited; (5) "Reactivity Data," including the likelihood of fire or explosion when the material is treated or stored in ways used by the reporting party; (6) "Health Hazard Information," including the types of injuries commonly resulting from exposure and proper first aid treatment; (7) "Spill or Leak Procedures," including the number and type of personnel and equipment necessary to deal with any release; (8) "Special Protection Information," including preventative measures necessary to insure worker safety; and (9) "Special Precautions," including additional information not covered in the prior headings. CAL/OSHA, CAL/OSHA FACT SHEET No. 12: MATERIAL SAFETY DATA SHEETS (undated).

The inventory report forms require basic information about how much of a hazardous material is used, when it is used, and where and how it is stored when not in use. California and Berkeley emergency response personnel acting under EPCRA require reporting parties to use a "Tier II Emergency and Hazardous Chemical Inventory Form," an example of which is set out at 40 C.F.R. § 370.41 (1988). This form requires that the reporting party set out separately for each hazardous material: (1) the name and Chemical Abstract Service (CAS) number of the material; (2) the type of hazard posed by the material (fire or reactivity, acute or chronic, etc.); (3) the maximum daily amount of the material onsite; (4) the average daily amount; (5) the number of days the material is onsite during the year; (6) the method by which the material is stored; and (7) the exact location, by description and by map, of the hazardous material. See also ENVT. HEALTH DEPT., CITY OF BERKELEY, INVENTORY REPORTING FORM (available in the offices of the Environmental Health Depart.).

If the information contained in the MSDS is already known or otherwise available to local emergency response officials, then reporting parties may submit a list of the names of the materials falling within the requirements of section 311. EPCRA § 311, 42 U.S.C. § 11021 (Supp. V 1987) (implementing regulations at 40 C.F.R. § 370.21(b) (1988)).

82. Id. § 302, 42 U.S.C. § 11002 (implementing regulations at 40 C.F.R. § 370.20 (1988)).
83. Id. § 302, 42 U.S.C. § 11002 (implementing regulations at 40 C.F.R. § 370.20 (1988)).
84. Id. § 311, 42 U.S.C. § 11021 (implementing regulations at 40 C.F.R. § 370.28 (1988)).
86. To be covered by section 313, a business must employ more than 10 full-time people and fall within Standard Industrial Classification (SIC's) codes 20 to 39. 40 C.F.R. § 372.22 (1988).
pounds, of certain listed hazardous materials. 87 "Form R" requires information on how hazardous materials are used and disposed of, as well as how much of each material was released into the environment during normal use over the previous calendar year. 88

Section 304 of EPCRA enacts "emergency release" reporting. 89 Under this section, the owner or operator of the business must immediately report the release of any hazardous material 90 in excess of the "reportable quantity" to local emergency response officials. 91 The reportable quantity applicable to any given material is provided as an annotation to the various lists of materials governed by section 304. 92

A covered release triggers at least two reports. First, the reporter must immediately notify emergency response officials of the release, the type of material released, and any curative measures that should be taken immediately. 93 EPA contemplates that this report will be made over the telephone, typically to a fire department. 94 As soon as practicable after this notice, the reporter must provide a followup report describing what actions were taken by the business to contain the release and what, if any, injuries were caused by the release. 95

A sixth reporting requirement could arise under section 303(d)(3) of EPCRA. It creates a discretionary power in local emergency-planning agencies to request additional information "necessary for developing and

87. 40 C.F.R. § 372.30 (1988). The list of covered hazardous materials is at id. § 372.65. Again, businesses must calculate the amount of hazardous material present as an ingredient in a mixture or solution when calculating the total material on the site. Id. § 372.45. See supra notes 78 and 84 and accompanying text. To facilitate accurate reporting of hazardous materials in mixtures or trade name products, section 313 requires manufacturers or processors who supply such mixtures to other businesses to notify the consuming business of the presence of the hazardous material and to provide information as to what percentage of the mixture or trade name product is constituted by the hazardous material. 40 C.F.R. § 372.45 (1988).

88. 40 C.F.R. § 372.85 (1988). More specifically, "Form R" requires the reporting business to specify: (1) the name and location of off-site disposal facilities used; (2) the use to which each hazardous material is put; (3) the estimated amount of each material released, with separate listings for point sources, nonpoint sources, air releases, water releases, and land releases; (4) releases from point versus nonpoint sources; and (5) the type of waste treatment method used for each hazardous material and its efficiency. Id.


94. See, e.g., id. § 355.40(b)(4) (explicitly allowing a report over the telephone in the case of transportation-related releases).

95. Id. § 355.40(b)(3).
implementing” an emergency response plan.96 This power has yet to be exercised with any regularity, so it is hard to generalize about the type of information local emergency planners may require. The local planners interviewed for this Comment felt that there were very few limits on this power and that any quantity or type of information could be required.97 Broadly construed, this section would empower agencies to go beyond requests for additional information in particular cases and to modify the standard reporting forms required by every facility reporting to that local agency.

State level reporting rules parallel, and sometimes incorporate, the reporting requirements of EPCRA. Section 25533 of California’s Health and Safety Code tracks EPCRA section 302 by requiring the submission of reports from parties possessing more that a “threshold planning quantity” of a listed hazardous material.98 Under section 25533, a “registration form” must be filed with local emergency personnel if a business handles “acutely hazardous” materials in excess of 500 pounds for solids, 200 cubic feet for gases, and 55 gallons for liquids.99 For purposes of section 25533, state officials have defined “acutely hazardous materials” as all materials designated “extremely hazardous” under section 302.100 The registration form parallels the “emergency planning notification” required by EPCRA section 302.101 In addition to certain emergency plans discussed later,102 the registration form requires the names of the hazardous materials handled, a brief description of what the chemicals are used for, and how much is used for each purpose.103

Sections 25508 and 25509 of the Health and Safety Code simply incorporate EPCRA section 312, which requires inventory reporting. Sections 25508 and 25509 were drafted to conform California’s inventory reporting system to the federal system.104 Submission of a federal “Tier II” inventory report to local emergency-planning officials in accordance

---

97. Interview with Jack Brannan, Emergency Services Coordinator, Hazardous Materials Division, California Governor’s Office of Emergency Services, in San Francisco, California (May 25, 1989) [hereinafter Brannan Interview]; interview with Britt Johnson, Department of Environmental Health, City of Berkeley, in Berkeley, California (May 23, 1989) [hereinafter Johnson Interview].
98. CAL. HEALTH & SAFETY CODE § 25533 (Deering 1988). See supra notes 77-78 and accompanying text.
99. CAL. HEALTH & SAFETY CODE § 25533(a) (Deering 1988).
100. Interview with Gary Burton, Associate Hazardous Materials Specialist, Hazardous Materials Division, California Governor’s Office of Emergency Services, in Sacramento, California (Mar. 17, 1989) [hereinafter Burton Interview].
102. See infra text accompanying notes 149-53.
103. CAL. HEALTH & SAFETY CODE § 25533(b) (Deering 1988).
104. Burton Interview, supra note 100.
with EPCRA section 312 meets the requirements of both section 25508 and 25509.\textsuperscript{105}

The only substantial difference between the state and federal inventory reporting rules is set out in section 25503. This section, as implemented in the regulations,\textsuperscript{106} requires a "business plan" in addition to a "Tier II" form.\textsuperscript{107} The business plan requires the reporting business to prepare a map of the business that details the location of all hazardous materials.\textsuperscript{108}

Finally, sections 25507 and 25507.1 parallel EPCRA section 304 in their treatment of release notifications. Section 25507 requires that a business discovering a release of hazardous material immediately report the release to local emergency response personnel.\textsuperscript{109} Section 25507.1 specifically cites EPCRA section 304 and requires state officials to prepare report forms that will meet the requirements of the followup reports called for by section 304.\textsuperscript{110}

Like the state system, Berkeley's Hazardous Material Disclosure Ordinance also tracks many of the federal requirements.\textsuperscript{111} However, there are two important differences between the requirements of the Berkeley ordinance and those of the federal and state systems. First, the reporting thresholds of the Berkeley ordinance are substantially lower than either the federal or the state thresholds. Any business that possesses carcinogens or reproductive toxins in any amount—a so-called zero quantity reporting threshold—must fill out a report.\textsuperscript{112} For all other hazardous materials the reporting thresholds are 8 pounds for solids, 200 cubic feet for gases, and 1 gallon for liquids.\textsuperscript{113}

The second difference between the Berkeley ordinance and the state and federal reporting systems is that instead of requiring different reports for different kinds of information, the Berkeley ordinance requires one large annual report, referred to as the "Disclosure Form."\textsuperscript{114} The disclosure form requires the reporting business to provide separately, with respect to every "hazardous substance": (1) an MSDS; (2) the chemical name, common name, and Chemical Abstract Service (CAS) identification number; (3) the EPA waste stream code (if applicable); (4) the method of storage; (5) the amount used, on average, over the course of a

\textsuperscript{105} Id.
\textsuperscript{106} 19 C.C.R. § 2729 (1988).
\textsuperscript{107} Id.
\textsuperscript{108} Id. § 2729(a)(4).
\textsuperscript{109} CAL. HEALTH & SAFETY CODE § 25507 (Deering 1988).
\textsuperscript{110} Id. § 25507.1.
\textsuperscript{111} B.M.C. §§ 11.52.040-100 (1986).
\textsuperscript{112} Id. § 11.52.040(E). See also Letter from Berkeley's Department of Environmental Health to all city-licensed businesses (June 30, 1986).
\textsuperscript{113} B.M.C. § 11.52.070(c) (1986).
\textsuperscript{114} Id. § 11.52.040.
year; (6) a map of the business' floor plan drawn to scale and showing sufficient information about where the hazardous substance is stored and handled to allow emergency response personnel to prepare "adequate emergency responses"; (7) "sufficient information" about any releases over the course of the year to "allow the community to understand the source and content of the release"; (8) the SIC code of the business; (9) the name of contact people available during business and nonbusiness hours; and (10) any other information requested by Berkeley's Department of Environmental Health "necessary to protect health and safety or the environment."

As the above laundry list suggests, the Berkeley ordinance requires a large amount of information. When these broad reporting requirements are combined with the state and federal reporting rules, and the reporting rules are coupled with the broad definitions of hazardous materials, the amount of information businesses are required to collect and report is massive.

4. Enforcement

After specifying who should report, what materials are covered, and the mechanics of the reporting process, the community right-to-know laws provide for enforcement. The rules vary and the discussion that follows begins with the state rules, which are the most stringent.

A failure to comply with the reporting requirements of the California community right-to-know rules creates civil liability of up to $5,000 per day of violation plus the cost of any emergency response efforts or cleanup efforts undertaken by city, county, or state officials. Noncompliance may also result in criminal liability up to $25,000 per day in fines and a maximum one-year jail term for the first offense, and up to $50,000 per day in fines and a maximum two-year jail sentence for a subsequent conviction. In addition to civil and criminal penalties, state or local administrators overseeing implementation of the right-to-know rules may enjoin any noncomplying practices. Injunctions and civil penalties may be sought by state or local officials.

State law also creates incentives for enforcement personnel to ensure that right-to-know laws are enforced. The office of the City Attorney, District Attorney, or Attorney General that brings a successful compliance action gets fifty percent of all monetary penalties awarded. In

115. Id. § 11.52.060(A)(1)-(9), (B).
116. CAL. HEALTH & SAFETY CODE § 25514 (Deering 1988). To raise liability to the $5,000 per day maximum, the failure to report must be preceded by reasonable notice of noncompliance. Id.
117. Id. § 25515.
118. Id. §§ 25516, 25516.2.
119. Id. § 25516.1.
120. Id. § 25515.2(a)(2).
addition, private citizens who provide information that "materially contributes" to a successful noncompliance action are awarded ten percent of any monetary penalties, up to a maximum award of $5,000.121

The enforcement provisions of EPCRA and the Berkeley Hazardous Materials Disclosure Ordinance also create civil and criminal liability for noncompliance. In addition to criminal liability, if a business negligently fails to comply, the Berkeley ordinance provides for up to $250 per day in civil liability.122 Intentional noncompliance may bring up to $5,000 per day in civil penalties as well as criminal punishment as a misdemeanor.123 Civil liability under the ordinance is only to the City of Berkeley; the Berkeley ordinance makes no provision for citizen suits.

EPCRA enforcement provisions vary with each section. Section 302, which requires notification of possession of hazardous materials to emergency response personnel, does not specify penalties for violation. Noncompliance with section 311, MSDS reporting, may lead to civil liability of up to $10,000 per day.124 Failure to comply with section 312, requiring inventory reporting, may lead to civil liability of $25,000 per day.125 Failure to comply with section 313, toxics release reporting, may result in civil liability of up to $25,000 per day.126 Most civil penalties can be sought by private plaintiffs through citizen suits.127 In addition the "substantially prevailing" party in any civil action may receive attorney fees, expert witness fees, and other litigation costs in addition to the above penalties.128

The only monetary penalty in either the federal or Berkeley rules to exceed state penalties for noncompliance is the provision setting out the penalty for noncompliance with EPCRA section 304. Section 304 requires immediate notice to emergency response personnel if extremely hazardous chemicals are accidentally released.129 Here, civil liability may reach $25,000 per day for the first offense and $75,000 per day for subsequent offenses.130 A "knowing and willful" failure to comply with section 304 may lead to criminal liability of up to $25,000 in fines, up to

121. Id. § 25517.
122. B.M.C. § 11.52.090(A), (D) (1986).
123. Id. § 11.52.090(B), (E).
124. 40 C.F.R. § 370.5(a), (c) (1988).
125. Id. § 370.5(b), (c).
126. Id. § 372.18.
127. EPCRA § 326(a)(1)(A), 42 U.S.C. § 11046(a)(1)(A) (Supp. V 1987). The penalties for the following violations may be pursued through citizen suits: (1) failure to submit an EPCRA section 304 emergency release notice; (2) failure to conform to MSDS and Tier I reporting requirements set out in sections 311(a) and 312(a); and (3) failure to submit toxic chemical release forms required under section 313(a). Id.
128. Id. § 326(f), 42 U.S.C. § 11046(f).
129. Id. § 304, 42 U.S.C. § 11004.
130. 40 C.F.R. § 355.50(a), (b) (1988).
two years in jail for the first offense, and up to $50,000 or five years in jail for subsequent offenses.\textsuperscript{131}

\section*{B. Planning and Public Participation}

The community right-to-know reporting system is of limited value unless some use is made of the information contained in the various reports. The rules establishing the community right-to-know system contemplate three uses for reported information: the development of emergency response plans, public participation in the right-to-know process through public disclosure of reported information, and public participation in the emergency-planning process.\textsuperscript{132}

\subsection*{1. The Planning Structure}

EPCRA, Berkeley's Hazardous Materials Ordinance, and California's right-to-know rules all take radically different approaches to establishing emergency response plans. Over time, the California planning rules, which are much more detailed than those in either the Berkeley ordinance or EPCRA, have come to dominate the planning system.

For decades, California's Office of Emergency Services (OES) has planned for floods, fires, and other disasters using a three-tiered administrative structure.\textsuperscript{133} At the top is the OES head office in Sacramento, which develops statewide plans for coordinating emergency response efforts.\textsuperscript{134} One tier below are six regional offices,\textsuperscript{135} which develop emergency response plans for their respective regions.\textsuperscript{136} At the bottom of this structure are local administering agencies responsible for developing emergency response plans for their areas.\textsuperscript{137} There are roughly 120 local administering agencies.\textsuperscript{138}

OES administrators have incorporated emergency plans required under the community right-to-know rules into this three-tiered structure. OES officials require that most right-to-know reports be submitted to the local administering agencies responsible for using the information to develop area plans for responding to a hazardous materials emergency.\textsuperscript{139} The requirements for an acceptable area plan are detailed and include

\begin{itemize}
  \item \textsuperscript{131} Id. § 355.50(c).
  \item \textsuperscript{133} Brannan Interview, supra note 97.
  \item \textsuperscript{134} Id.
  \item \textsuperscript{135} These offices correspond to California's six OES regions. Id.
  \item \textsuperscript{136} Id.
  \item \textsuperscript{137} Id.
  \item \textsuperscript{138} Id.
  \item \textsuperscript{139} Id.; see OFFICE OF EMERGENCY SERVICES, AGENCIES DESIGNATED TO ADMINISTER THE HAZARDOUS MATERIALS PLANNING PROGRAM (AB 2185 AND AB 2187) (Sept. 15, 1988).
\end{itemize}
both onsite procedures and extensive training for individual emergency responders,\textsuperscript{140} inspection of likely emergency sites,\textsuperscript{141} development of a central area-wide response management hierarchy,\textsuperscript{142} public relations,\textsuperscript{143} and incident critique and followup.\textsuperscript{144} Region and state plans are governed by specific administrative standards, which are also quite detailed.\textsuperscript{145}

The state community right-to-know rules also require extensive private emergency planning by the managers of facilities that handle hazardous materials. California's inventory reporting system, for example, requires response personnel to show where hazardous materials are located.\textsuperscript{146} As part of the business plan submitted with every inventory report, each business must describe its own response program.\textsuperscript{147} This program must include: (1) notification of emergency response personnel; (2) employee evacuation plans; (3) employee training in how to handle hazardous materials and how to assist government response workers in their response to any release; and (4) plans for mitigating any injury to the community that a release might cause.\textsuperscript{148}

Additionally, businesses handling extremely hazardous materials may be required to develop, at their own expense, a Risk Management and Prevention Program.\textsuperscript{149} This program must begin with an extensive "hazard and operability study," identifying the hazards to employees and the surrounding community created by the business' use of hazardous materials.\textsuperscript{150} Based upon this study, the owner or operator of the business must, as necessary: (1) add monitoring equipment and alarms to machinery; (2) create a program of private hazard audits and inspections; and (3) alter the design and use of the facility.\textsuperscript{151}

In California, because of the level of expertise of OES officials and the stringency of state planning requirements, local and federal officials have integrated their requirements into the state emergency-planning system. The Berkeley ordinance is virtually silent on the subject of emergency planning. The ordinance provides only that the Chief of Berkeley's Department of Environmental Health must periodically report on how emergency response personnel are using the reported infor-

\textsuperscript{140} 19 C.C.R. §§ 2722, 2725 (1989).
\textsuperscript{141} Id. § 2723(a).
\textsuperscript{142} Id. § 2723(b), (d).
\textsuperscript{143} Id. § 2726.
\textsuperscript{144} Id. § 2728.
\textsuperscript{145} Brannan Interview, supra note 97.
\textsuperscript{146} 19 C.C.R. § 2729(a)(4) (1989).
\textsuperscript{147} Id. § 2731.
\textsuperscript{148} Id. §§ 2731-2732.
\textsuperscript{149} CAL. HEALTH & SAFETY CODE § 25534 (Deering Supp. 1989).
\textsuperscript{150} Id. § 25534(d).
\textsuperscript{151} Id. § 25534(c); see also 19 C.C.R. § 2731 (1989).
Upon their request, City of Berkeley enforcement officials were designated as a local administering agency within the OES system and thus rely primarily on state guidelines for developing emergency plans.

EPCRA requires the creation of an emergency-planning structure that is less detailed than the California rules. Section 301 calls for a two-tiered planning structure headed by State Emergency Response Commissions (SERC's). California officials have conformed to the federal requirements by creating the Chemical Emergency Planning and Response Commission (CEPRC) and then designating the six OES regions as Local Emergency Planning Commissions (LEPC's).

Section 303 of EPCRA establishes general requirements for acceptable emergency plans. Under section 303, these plans must be developed at the LEPC level and must include: (1) identification of reporting facilities and hazards; (2) release notification procedures; (3) methods for determining the amount of any release and the sectors of the community affected; and (4) regular training and exercises directed at improving the ability of local response personnel to respond to hazardous materials releases. The public and private planning required by the state rules meets all of these requirements.

2. Public Participation and Trade Secrets

In addition to emergency planning, the federal, state, and local rules all envision that the information provided in the right-to-know reports will form the basis of a political dialogue over the proper use and regulation of hazardous materials in the community. Specifically, all the rules call for public disclosure of reported information, and, in addition, the federal rules require public participation in the administration of the reporting and planning processes. At the time of EPCRA's creation, many businesses feared that community right-to-know reports would be used by competitors to discover proprietary information. As a result, the federal, state, and local rules all include special treatment for trade

152. B.M.C. § 11.52.110 (1986).
153. Steele Interview, supra note 34.
155. The Chemical Emergency Planning and Response Commission (CEPRC) was created by order of Governor Deukmejian. Interview with Lauren Volpini, Associate Hazardous Materials Specialist, Office of Emergency Services of Pleasant Hill, in Pleasant Hill, California (Mar. 26, 1989) [hereinafter Volpini Interview]. The CEPRC then designated the six OES regions as Local Emergency Planning Commissions (LEPC's) under its own authority. Id.
158. EPCRA § 301(c), 42 U.S.C. § 11001(c) (Supp. V 1987).
This section reviews the forms of public participation, then discusses how trade secret issues are handled.

The rules calling for public disclosure are comprehensive and straightforward. Section 324 of EPCRA states that, in general, all reports and notices required under the reporting provisions of EPCRA shall be available to the public. Section 25506 of the California Health and Safety Code makes all information submitted as part of a “business plan” available for public inspection. Berkeley Municipal Code section 11.52.050(C) provides for public availability of most reported information. Members of the public wishing to review a report typically must make an appointment with the custodian of the reports.

While the state and local rules stop with public disclosure, the federal community right-to-know rules proceed to create a number of other ways in which the public can participate in the community right-to-know process. Under section 301(c), state and local emergency-planning committees must allow citizens to sit as members and to participate in the management of the reporting and planning processes. Under section 313(e), any member of the public may petition EPA to add or delete a chemical from the lists of toxic substances subject to release reporting. If EPA approves the petition, EPA must finalize its decision through the notice and public comment procedures of formal rulemaking within 180 days. Over the last year, EPA has received roughly thirty petitions to delete and ten petitions to add. As of June 1989, only one of these petitions had been approved.

Finally, under EPCRA, citizens may be able to require businesses to supplement existing right-to-know reports through requests for additional information. If a business has submitted only a Tier I inventory report and a citizen contacts the LEPC with a request for Tier II information, the business must prepare and submit a Tier II form. Similarly, if a business conforms to the MSDS reporting requirements of section 311 by submitting only a list of reportable materials and a citizen

163. B.M.C. § 11.52.050(C) (1986).
164. Steele Interview, supra note 34.
167. Id. § 313(d), 42 U.S.C. § 11023(d).
168. Rule Interview, supra note 165.
169. Id.
requests a copy of a full MSDS, the business must prepare and provide one.171

The public participation provisions in general, and the public disclosure provisions in particular, create a theoretical, perhaps an actual, risk that the community right-to-know system will be used by business competitors to get trade secrets or other proprietary information. It is unclear if such misuse of the system has in fact occurred. It seems clear, however, that at least a few businesses suspect it to be a problem. EPA has received roughly 400 petitions to protect reported information as a trade secret,172 and state officials report receiving roughly thirty similar requests.173

The federal, California, and Berkeley trade secret provisions all operate in a three-step pattern. First, trade secrets are identified. All three codes similarly define "trade secret" as any information that is treated as confidential by the reporting business and that gives the business a competitive business advantage over others who do not know the information.174 Both the state rules and Berkeley's disclosure ordinance presume that a fact meets this definition if a business makes a written request that the fact be so treated.175 The litmus test comes when a member of the public requests to see a report containing presumed trade secrets. Again, under both the state and local systems, the business is given notice of the request and thirty or forty-five days, respectively, to bring an action seeking a declaratory judgment that the facts are trade secrets.176 If no such judgment is forthcoming, the presumption is dropped and the information is disclosed.177

The federal system places the litmus test at the beginning. Every fact is presumed disclosable unless the reporting business can substantiate a claim of trade secrecy to the satisfaction of EPA.178 To satisfy EPA and create a presumption of trade secrecy, the business must complete a

171. Id. § 311(c)(2), 42 U.S.C. § 11021(c)(2).
172. Rule Interview, supra note 165.
173. Interview with Michelle Labella, Report Processor, California Governor's Office of Emergency Services, in Sacramento, California (June 6, 1989).
174. 53 Fed. Reg. 28,801-02 (1988) (to be codified at 40 C.F.R. § 350.1) (adopting the definition set out in the RESTATEMENT OF TORTS § 757 comment b (1939)); CAL. HEALTH & SAFETY CODE § 25511(a) (Deering 1988) (adopting the definition set out at CAL. GOV'T CODE § 6254.7 (Deering 1988) and CAL. EVID. CODE § 1060 (Deering 1988)); B.M.C. § 11.52.100(A) (1986) (adopting the definitions set out at CAL. GOV'T CODE § 6254.7 (Deering 1988) and CAL. EVID. CODE § 1060 (Deering 1988)).
175. CAL. HEALTH & SAFETY CODE § 25511(c) (Deering 1988); B.M.C. § 11.52.100(A) (1986).
176. CAL. HEALTH & SAFETY CODE § 25511(c) (Deering 1988); B.M.C. § 11.52.100(H) (1986).
177. CAL. HEALTH & SAFETY CODE § 25511(c) (Deering 1988); B.M.C. § 11.52.100(H) (1986).
lengthy substantiation form that requires detailed information. Even after submission of the form, EPA may, on its own initiative, review the claim for trade secrecy and deny it.

After trade secrets are identified, each system outlines how the information is to be protected. In each case, the protection is rather slight. Under federal rules, the only advantage gained by trade secret treatment is that a reporting business may substitute a generic chemical class for a particular chemical name and may provide maximum and minimum quantities rather than specific amounts. Under state rules and the Berkeley ordinance, the public is still allowed to review all reports with the trade secret information expunged.

Finally, all three right-to-know systems contain many exceptions that allow disclosure of trade secrets to certain people. Under EPCRA, trade secrets may be disclosed to: (1) other government officials including Congress and agencies that do not generally regulate hazardous materials; (2) anyone obtaining a court order to disclose; and (3) medical personnel in an emergency or when a "reasonable" need for the information is established in writing. State rules and the Berkeley ordinance adopt roughly the same exceptions.

III
THE IMPACTS OF THE COMMUNITY RIGHT-TO-KNOW SYSTEM

Despite the complexity of the legal rules that underlie the community right-to-know system, the basic structure of the system is simple. Businesses handling hazardous materials must report that activity to the government and, through government disclosure, to the community generally. Community members and governmental officials use the reports both to assess the health threat created by the hazardous materials and to develop plans for dealing with accidents and emergencies involving those

179. Id. at 28,808-15 (to be codified at 40 C.F.R. § 357.27) (requiring descriptions of measures taken to safeguard confidentiality, any disclosures made and to whom, the nature of the competitive advantage the secret creates, the chemical composition of the secret, any obvious link between the chemical and the company seeking protection, the availability of the chemical to the public or competitors, and the cost of determining the components of the chemical by chemical analysis).
180. Id. at 28,804 (to be codified at 40 C.F.R. §§ 350.11-.13).
181. Id. at 28,802 (to be codified at 40 C.F.R. § 350.5).
182. Steele Interview, supra note 34. In the case of reports held by Berkeley officials, redactions are done by hand immediately before viewing. Because treatment as a trade secret requires the reporter to gain a declaratory judgment, this procedure has never, in fact, been used in Berkeley.
184. Id. at 28,808 (to be codified at 40 C.F.R. § 350.25).
185. Id. at 28,815 (to be codified at 40 C.F.R. § 350.40).
186. CAL. HEALTH & SAFETY CODE §§ 25511, 25538 (Deering 1988) (no court order provision); B.M.C. § 11.52.100(C)-(E) (1986) (no court order provision).
materials. Finally, as a byproduct of the reporting and planning processes, community members, business people, and government officials develop a political dialogue over the role of hazardous materials in the community. Ideally, this dialogue forms the basis of a cooperative relationship between these groups.

The effectiveness of this system can be evaluated from two perspectives. First, it could be compared to what came before it. From this perspective, the system looks very effective because very little reporting, emergency planning, or public involvement in hazardous materials regulation existed before the passage of the community right-to-know rules. Tens of thousands of California businesses now regularly report the release of toxic substances, the presence of hazardous materials in their inventory, and how these materials are handled, stored, and disposed of. Roughly 40,000 reporting businesses have developed at least a minimal response plan for hazardous materials emergencies that occur at their facilities. In addition, the 129 local agencies, the six regional OES offices, and the head office of the OES emergency-planning system have all developed area, regional, and state plans for responding to a hazardous materials emergency. Finally, members of the public are participating in California's six LEPC's and taking advantage of the public disclosure requirements of the right-to-know rules.

The effect of the community right-to-know system can also be evaluated by comparing the accomplishments of the system with its goals of comprehensive reporting, effective emergency response planning, and encouraging a meaningful public dialogue over the proper role of hazardous materials in communities across the state. From this perspective, the system established by the right-to-know rules is less impressive.

As described below, there are substantial problems with the reporting process that work to undermine the emergency planning and public participation processes. Confusion and conflict in the administration of

---

187. Interview with Ken Rydbrink, California Department of Environmental Health Services, Air Resources Board, in Sacramento, California (May 22, 1989) [hereinafter Rydbrink Interview] (reporting that state officials directly received roughly 1,700 toxic release reports); Interview with Jerry Schimke, California Governor's Office of Emergency Services, in Sacramento, California (June 7, 1989) [hereinafter Schimke Interview] (reporting that a recent OES survey of 90 of the state's 129 administering agencies shows that these agencies have received "business plans" that incorporate inventory reporting and private emergency planning from 39,884 businesses).

188. Schimke Interview, supra note 187. While the quality of individual reports varies tremendously, some sort of planning is required to submit a minimally acceptable report under state law.

189. Burton Interview, supra note 100.

190. Id. (describing public participation in California's six LEPC's, which are constituted primarily by staff members from the six regional offices of the OES); Rydbrink Interview, supra note 187, (describing use of release reports by the Sierra Club and Greenpeace); Johnson Interview, supra note 97, (describing review of inventory reports and business plans by business people and concerned citizens).
ECOLOGY LAW QUARTERLY

the right-to-know program have hindered full and efficient implementation of the system. In addition, many of the accomplishments the right-to-know system has achieved, or will soon achieve, are not attributable to the legislative design of the system. These achievements are, instead, attributable to the creativity and flexibility of a class of community right-to-know specialists that has been created primarily through the implementation of the right-to-know rules.

A. Reporting Problems

Hazardous material reports form the informational backbone of the right-to-know system. Without accurate reports containing useful information, safety planning and public debate based on the reports are of limited value. Right-to-know reporting has two fundamental problems: (1) facility noncompliance and (2) report formats that are difficult for local agencies to process and confusing to the public.

The reporting rules have met with only moderate compliance. State and federal officials estimate that fifty percent of those businesses required to file reports have in fact filed. Critics, including Senator Frank Lautenberg, have suggested that forty percent is a more accurate figure. Additionally, many of the reports that are filed represent so-called paper compliance—the filing of an inaccurate or incomplete report simply to meet a filing deadline. EPA and state officials verify only one to two percent of the hazardous material emission reports they receive, and, as one state official put it, “everyone takes the reported data with a grain of salt.”

Local officials are responsible for verifying inventory and use reports, and the level of verification varies from locality to locality. Even in Berkeley, where up to ninety percent of all reports are at least partially verified, local officials admit that paper compliance has been commonplace. Problems of noncompliance and paper compliance are often explained in terms of a business learning curve: the right-to-know laws are new; therefore it will take time for businesses to learn that they must report and how to report properly. This explanation is important, but it

191. Jim Markis of EPA has estimated that 50% of the facilities required to file release reports under section 313 of EPCRA have done so. EPA Official Says Congress May Focus on Chemical Accident Prevention Mandates, 12 Chem. Reg. Rep. (BNA) 1606 (1989). State officials have confirmed a similar percentage of filings under state and local reporting rules. Rydbrink Interview, supra note 187; Brannan Interview, supra note 97.


193. Rydbrink Interview, supra note 187.

194. Johnson Interview, supra note 97.
is also incomplete. There are three additional reasons for noncompliance that point out more fundamental problems with the reporting structure.

First, there is the cost of compliance. Many businesses do not have the expertise to develop hazard inventories, safety plans, and other information required by the reports. Acquiring this expertise is very expensive. Consultants in the San Francisco Bay Area typically charge between $40,000 and $60,000 to bring a medium-sized business with fewer than fifty employees into initial compliance. This cost figure does not include the indirect cost of diverting existing staff away from their primary tasks to assist consultants who often take four to six weeks to complete an initial compliance program. Many Berkeley businesses that have complied have done so only with the addition of new full-time personnel devoted to hazardous materials control and compliance.

The high cost of compliance works as a disincentive. Officials may respond to this disincentive in two ways: (1) by balancing it with enforcement actions that create an incentive to comply, and (2) by decreasing the cost of compliance through government compliance advice and assistance.

Enforcement has become subject to a variation of the free rider problem. Civil and criminal enforcement suits are very expensive, and the federal, state, and local enforcement agencies all seem to be waiting for each other to prosecute noncomplying facilities. EPA, for example, has announced a policy of “leading from behind.” Under this strategy, the primary responsibility for enforcing the inventory and use reporting rules is placed on state officials, whom EPA encourages and supports “from behind” with conferences, booklets, and limited data analysis. California state officials, in turn, view the city and county governments that actually receive the inventory and use reports as the primary enforcers. Local officials, who have neither the wherewithal to prosecute suits nor the political power to send the responsibility for enforcement back up the line, simply do not file suit. By February of

196. Id.
197. Johnson Interview, supra note 97.
199. Id.; see also EPA Issues Interim Strategy Document for Major Sections of Right-to-Know Law, 12 Chem. Reg. Rep. (BNA) 1483 (1989). “Development of working relationships with state emergency response commissions [is] central to EPCRA enforcement because most of the law’s mandates are to be carried out by states and localities. . . . The EPA said it is developing several ‘tools’ [pamphlets and data analysis] to help regions identify violators of EPCRA provisions.” Id.
200. See Burton Interview, supra note 100; Brannan Interview, supra note 97.
1989, only twenty-two of California’s 129 local administering agencies had taken any legal action against noncomplying businesses;¹⁰¹ 107 had not initiated any legal action against any noncomplying business.¹⁰²

In October of 1988, EPA was severely criticized by Senator Frank Lautenberg for its failure to take a direct and leading role in enforcement.¹⁰³ In response, between October of 1988 and April of 1989, EPA initiated twenty-seven suits against companies that allegedly failed to comply with the release reporting requirements of EPCRA sections 313 and 304.¹⁰⁴ Only two of these actions were against California companies.¹⁰⁵ While this is an improvement, it cannot be considered strong enforcement when as many as 30,000 companies nationally—1,700 companies in California alone—have failed to meet the reporting requirements established by EPCRA sections 313 and 304.¹⁰⁶

In addition to high cost and weak enforcement, compliance with the reporting rules of the right-to-know system has been hindered by pervasive administrative confusion regarding the right-to-know laws’ requirements and purposes. Businesses are regularly given different and conflicting compliance advice by federal, state, and local officials.¹⁰⁷ In the face of high costs and little chance of detection, a businessperson who is given confusing and contradictory information on how to comply is likely to give up. Indeed, one state official who asked not to be named suggested that waiting for an enforcement action may be a wise strategy—at least the complaint will decisively define how, when, and where to file reports.

Noncompliance and paper compliance undermine the integrity of the entire right-to-know system. The system does not fully inform the community when fifty percent of the hazardous materials present in the community remain hidden. Similarly, government officials cannot prepare adequate safety plans when they do not have full and adequate information about the hazards they are planning to avoid.

¹⁰². Id.
¹⁰⁴. Twenty-five actions were initiated in December of 1988 and two were initiated in April of 1989. EPA Issues Complaints Against Firms Over Toxic Chemical Reports, BNA Env’t Daily (Dec. 22, 1988) [WESTLAW BNA-END]; Telephone interview with John Roland, EPA EPCRA specialist (May 24, 1989) [hereinafter Roland Interview].
¹⁰⁵. Actions have been initiated against United States Can Co. in San Leandro, California and Sola/Baenwa-Hind, a division of the Pilkington Corp., in San Diego, California. Roland Interview, supra note 204.
¹⁰⁶. Implementation Hearings, supra note 192, at 3 (30,000 nationally); Rydbrink Interview, supra note 187, (1,700 in California).
¹⁰⁷. Davis Interview, supra note 50; Brannan Interview, supra note 97; Johnson Interview, supra note 97.
The system is also marred by a second problem. The format and quantity of information requested in the reports is unwieldy and confusing. Either of these problems alone would be a hindrance to the community right-to-know system; together they prove to be a formidable obstacle to effective emergency planning and public disclosure of reported information.

The quantity of information problem is the more serious. Inventory reports are often over 100 pages and, for companies that specialize in manufacturing or processing hazardous materials, they may exceed 1,000 pages. Government officials have neither the personnel nor the data processing facilities to deal with these reports. Jack Brannan, an Emergency Services Coordinator in California's Office of Emergency Services, stated that, "We (state officials) encourage local officials to keep all the reports. We have no place to store them and could never read them all."

Local officials are often no better off. Until February of 1989, the City of Berkeley employed only one full-time person to administer every aspect of its right-to-know system. Even with the help of an additional staff member, Berkeley officials have not found the time to read all of the reports. Other local administering agencies have reported similar problems dealing with the volume of reports. The quantity problem has gotten so bad that EPA has proposed altering the federal inventory reporting rules to exclude 300,000 businesses nationally. Without the exclusions, EPA officials argue, the volume of information will overwhelm state and local authorities.

Alongside the quantity problem is a problem with the type of information the reporting forms require and the way in which the forms require the information to be presented. The format of the reports often requires omitting important information and presenting the information that is required in a confusing fashion.

The hazards posed by chemicals vary tremendously with the circumstances. Wind, rain, temperature, quantity, dispersion rate, and a

208. Steele Interview, supra note 34; Brannan Interview, supra note 97.
209. Brannan Interview, supra note 97.
210. Johnson Interview, supra note 97.
211. Id.
213. Shabecoff, Program to Monitor Hazardous Material Is Splitting Agencies, N.Y. Times, May 24, 1989, at A1, col. 1. More specifically, EPA proposes to maintain the "threshold" reporting quantities that trigger the duty to report at 10,000 pounds for hazardous materials and 500 pounds for extremely hazardous materials. While this change would have a dramatic effect nationally, it would have very little effect in California where state and local laws already set much lower threshold quantities. See supra notes 99-113 and accompanying text.
214. Shabecoff, supra note 213, at A14, col. 3.
host of other factors affect how released chemicals react with the environment, and how they affect exposed individuals. Without such information, it is impossible for citizens to assess the health hazard posed by businesses in their communities and for government officials to develop the most effective emergency plans.

EPA initially required inventory reports to include health risk information in the form of Material Safety Data Sheets. This approach ultimately proved impractical for two reasons. First, MSDS's were designed by OSHA to describe the health threat posed by hazardous materials in the workplace. The health risk information on an MSDS is frequently oriented toward extreme, indoor, individual exposures and thus is not very useful to an assessment of the risks posed by releases that subject masses of people to mild exposures. Second, MSDS's are voluminous. Now MSDS filing is optional, and state and local officials urge businesses not to file an MSDS in most cases.

Without MSDS's, or some substitute, how can the government or citizens evaluate the health threat posed by reported hazardous materials? For most citizens, the answer is simply that they cannot. A recent study of the Texas right-to-know system by Professor Susan Hadden of the University of Texas concludes that even those few citizens who bother to obtain reported information have difficulty understanding it. The reports often make confusing use of acronyms and numerical codes, and they lack "additional information, especially about health effects and exposure levels, needed to put the chemical data into context."

Unlike most of the public, government officials have not been completely stymied. Most officials have assessed health risks and developed response plans only by supplementing reported information with additional research both at the reporting facilities, in the form of inspections, and through traditional library research. Given government's limited resources, this research effort cannot be carried out with reference to every material and every facility.

216. See Chemical Information Provided, supra note 212, "John Eversole, commander of the Chicago Fire Department Hazardous Incident Team, [stated] that many fire departments have been overwhelmed by the volume of MSDS's sent to them under EPCRA and have found much of the information to be inconsistent and of little use." Id.
217. See Implementation Hearings, supra note 192, at 40 (Ohio officials stating that they have been successful in discouraging 90% of reporting businesses from filing MSDS's). This discussion is not meant to suggest that MSDS's are useless. Britt Johnson of Berkeley's Department of Environmental Health is careful to point out that in many cases, such as unique proprietary chemicals, MSDS information is the only health risk information a reporting business has. In such cases, MSDS reporting is essential. Johnson Interview, supra note 97.
219. Id.
220. Johnson Interview, supra note 97; Brannan Interview, supra note 97.
221. Johnson Interview, supra note 97; Brannan Interview, supra note 97.
Thus, like noncompliance, problems with the quantity and quality of reported information undermine the community right-to-know system. Reports that are too voluminous to read fail to inform the government and the public alike of hazardous materials in the community. The failure of the reports to provide accessible information about health risks posed by environmental releases prevents emergency planners from developing the most effective plans. It also prevents the public from using community right-to-know reports to develop a sense of the safety threat posed by hazardous materials in the community.

B. Conflicting and Confused Implementation

In addition to reporting problems, the community right-to-know system has been hindered by confusing and often contradictory implementation. On a practical level, federal, state, and local officials have different ideas about both what the rules require and how the federal, state, and local rules fit together. On a more theoretical level, federal, state, and local officials have different and often conflicting views of the system's overall purposes. Both of these conflicts undermine the right-to-know system by creating unnecessary obstacles to business compliance, citizen participation, and intergovernmental cooperation.

The federal, state, and local right-to-know laws were not passed as a unified system. At the time of their passage, all three systems were intended to be relatively independent. Thus, each system provides different and often overlapping rules for reporting, emergency planning, and public participation. As the rules have been implemented there has been an effort to coordinate their requirements and render them consistent. This effort is at best incomplete; at worst, it is a failure.

One obvious example of the current lack of coordination is the prevalence of administrative redundancy. This problem arises when the reporting requirements of, for example, the state and local rules are different enough to prevent one report from complying with both systems, yet similar enough to render two separate reports substantially redundant. In some areas of the law, the problem of conflicting rules does not create redundancy because the strictest rule incorporates the others. However, full incorporation is not possible in the area of community right-to-know because the federal, state, and local systems have different requirements that cannot be collapsed or incorporated.

For example, federal, state, and local reporting forms often use different formats. The forms require substantially similar information, yet often none of the forms preempts the others, and each governmental unit insists on its own forms. Consequently, strict compliance would re-

---

222. See supra notes 25-186 and accompanying text.
223. See supra notes 79-115 and accompanying text.
quire filing all three reports. A similar problem is posed by the different federal, state, and local standards for determining when a material is hazardous.\textsuperscript{224} If each governmental unit insists on its own standards, businesses may be forced to maintain separate compliance records and file separate reports to comply with each set of rules.

Administrators and legislators have been sensitive to the problem of redundancy from the start and have made efforts to prevent it. To further uniformity in reporting forms, the OES has developed a model inventory reporting form that local administering agencies may adopt.\textsuperscript{225} Furthermore, following the passage of California Assembly Bill 2189,\textsuperscript{226} which requires the OES to “eliminat[e] duplicative reporting requirements to the extent . . . practicable,”\textsuperscript{227} the OES defined “acutely hazardous materials” under California law as equal to “extremely hazardous materials” under the federal rules.\textsuperscript{228} The OES is presently revising state inventory reporting regulations to incorporate the inventory reporting requirements under sections 311 and 312 of EPCRA.\textsuperscript{229}

Despite these efforts, there is still a substantial redundancy problem.\textsuperscript{230} Part of the persistence of this problem is due to a second more fundamental problem: the limited vision, or limited loyalty, of some administering officials. When contacted for compliance advice, many officials will base their comments solely on the law of their employer: federal officials give only federal compliance requirements, state officials give only state law advice, and local officials look only to local law.\textsuperscript{231} Frequently, the result is contradictory advice that leaves businesses confused and frustrated.\textsuperscript{232}

The problem of the limited vision of many agencies and administrators is especially severe at the local level. Local administering agencies are free to adopt their own reporting format and to require idiosyncratic information not required in other localities.\textsuperscript{233} Many administering

\begin{footnotes}
\footnotetext[224]{See supra text accompanying notes 51-75.}
\footnotetext[225]{Letter from Gerald Schimke, Chief of the Hazardous Materials Section, OES, to all Administering Agencies (Feb. 21, 1989).}
\footnotetext[227]{CAL. HEALTH & SAFETY CODE § 25503.1 (Deering Supp. 1989).}
\footnotetext[228]{Burton Interview, supra note 100.}
\footnotetext[229]{Id. See CAL. HEALTH & SAFETY CODE § 25509(c) (Deering Supp. 1989) (mandating such reforms).}
\footnotetext[230]{See infra text accompanying notes 233-36.}
\footnotetext[231]{Brannan Interview, supra note 97; Johnson Interview, supra note 97; Davis Interview, supra note 50.}
\footnotetext[232]{Brannan Interview, supra note 97, (describing how some businesses send three different sets of reports to state, local, and federal officials, typically accompanied by a letter urging them to work out their disagreements among themselves).}
\footnotetext[233]{19 C.C.R. §§ 2723-2724, 2726 (1989). OES regulations all open with the phrase, “Area plans shall include, but not be limited to.” OES officials interpret this phrase to allow administering agencies to alter the format of the reports and to add to the minimum information requirements set out in the OES regulations. Brannan Interview, supra note 97.}
\end{footnotes}
agencies have exercised this freedom despite the availability of model forms. As a result, businesses with facilities that cross the jurisdictional borders of administering agencies may be required to keep separate records and submit separate reports, despite the fact that all administering agencies require substantially similar information.

In Alameda County, for example, there are seven different municipal and county administering agencies. All of these agencies require substantially similar information in their reports, and all have developed their own reporting formats that businesses must use in addition to complying with state and federal rules. In theory, a large business with facilities in the jurisdiction of each agency would have to maintain seven different sets of substantially similar compliance records and submit seven substantially similar reports. In practice, businesses with facilities in two or three administrative jurisdictions are common. Even more common are smaller businesses that buy and sell hazardous materials across jurisdictional borders. These businesses are forced to generate new records and new reports rather than rely on reports filed by their suppliers.

Redundancy and inconsistent advice increase the cost of complying with the community right-to-know rules and act as a disincentive to compliance. Thus, these particular problems undermine the right-to-know system by discouraging optimum reports, which are the informational foundation upon which the rest of the system rests.

In addition to the problems of limited and conflicting advice and inconsistent compliance requirements, the implementation of the community right-to-know system has been marred by conflicts over the purposes of the system. The purposes, emergency safety planning, public participation, and providing a comprehensive informational base for hazardous materials regulation, are emphasized differently by the federal, state, and local rules. Until the conflicts between these purposes and the rules that serve them are fully resolved, the community right-to-know system will remain a confusing patchwork of administrative mechanisms.

As described earlier, the community right-to-know system was legislated to serve a number of related yet distinct purposes. Firefighters and hazardous materials specialists sought a comprehensive reporting system

234. Alameda County administers the right-to-know rules for all cities that have not opted to administer the program themselves. Berkeley, Fremont, Hayward, Newark, Pleasanton, and Union City have opted to administer the community right-to-know rules themselves.

235. Johnson Interview, supra note 97; Brannan Interview, supra note 97. For example, the University of California at Berkeley has facilities subject to reporting in unincorporated areas of Alameda County, the City of Berkeley, and the City of Richmond, whose program is administered by officials of Contra Costa County. Creed Interview, supra note 13.

236. Creed Interview, supra note 13.

237. See infra notes 241-45 and accompanying text.
that would track the path of hazardous materials through the community and provide a basis for effective emergency planning to protect firefighters and the community from toxic surprises. The general public, responding to widespread accounts of the disasters at Love Canal, Times Beach, and Bhopal, sought both to end the secret, private control of hazardous materials and to devise effective plans for dealing with disasters. Finally, environmental activists sought to create grassroots regulatory agencies that would publicize and politicize the hazardous materials regulatory process.

Different portions of the right-to-know system emphasize these purposes differently. The Berkeley ordinance, for example, emphasizes comprehensive reporting through the broadest statutory definition of hazardous materials and the lowest threshold reporting quantities. The ordinance makes no provision for emergency planning and establishes no separate commission or committee that would allow businesses and citizens to take part in the regulatory process. Chapter 6.95 of the California Health and Safety Code sets higher threshold reporting quantities than the Berkeley ordinance and makes no provision for public participation in the regulatory process. The California rules, however, do set out highly detailed standards for public and private emergency response plans.

The federal rules have the weakest reporting requirements and only limited planning guidelines. EPCRA creates a system of public involvement that includes public participation in the local committees that manage the right-to-know system, public petitions to list or delist toxic materials, and reporting requirements that respond to citizen demands for additional information.

The conflicting emphasis of the federal, state, and local rules has led to administrative and political problems. The clearest example is in the area of public participation. California's planning-oriented rules are administered through the state OES, which has divided the state into six large planning regions and placed one OES office in each region. When the federal rules required California to establish LEPC's and to allow for public participation, California simply designated its six regional OES offices as LEPC's and required public meetings once a month.

---

238. See supra notes 6-8 and accompanying text.
239. See supra notes 9-14 and accompanying text.
240. See supra notes 15-18 and accompanying text.
241. B.M.C. §§ 11.52.020, 11.52.040 (1986); see supra notes 51-62, 112-13 and accompanying text.
244. See supra notes 77-97 and accompanying text.
245. See supra notes 161-71 and accompanying text.
246. Burton Interview, supra note 100.
II, which includes Berkeley, embraces an area roughly 500 miles long stretching from the Oregon border to the southern end of Monterey County below Big Sur. OES officials acknowledge that the citizens and businesses of, for example, Eureka are virtually without representation at the Region II LEPC meetings held some 250 miles south in the San Francisco Bay Area.

The OES system is a far cry from the grassroots "democratization of chemical risk management" envisioned by the sponsors of EPCRA. The OES system’s failure to live up to the participation goals of the federal rules has led to political and administrative problems. Industry spokesmen have criticized the OES system for being unresponsive to the need for businesses and communities to engage in a public dialogue about hazardous materials. Administering agencies located far from the OES Region II office have ignored Region II policies that do not accommodate local concerns, such as the need for jobs in undeveloped rural regions.

A second conflict between the goals of emergency planning and comprehensive reporting has recently come to a head in the form of an EPA proposal to permanently exempt from federal reporting requirements smaller businesses that use or store less than 10,000 pounds of hazardous materials. Proponents of the measure argue that lowering the threshold quantity will only burden local officials with additional paper that serves little useful purpose. Opponents, however, argue that by failing to lower the threshold quantity to zero, EPA will exclude roughly 300,000 businesses from reporting and render the system useless as a comprehensive tracking tool for hazardous chemicals.

If EPA does not lower the threshold quantity, it will face both severe criticism from environmentalists and administrative confusion as

247. CALIFORNIA OFFICE OF EMERGENCY SERVICES, MUTUAL AID REGIONS MAP (Available from OES).
248. Brannan Interview, supra note 97.
249. Narus, supra note 10, at 14, col. 4 (quoting Fred Millar, Director of the Toxic Chemicals, Safety, and Health Project of the Environmental Policy Institute); see also Implementation Hearings, supra note 192, at 30 ("The spirit of Title III has been termed the 'democratization of chemical information.' " Testimony of Jorge Berkowitz, Director, Environmental Quality Division, New Jersey Department of Environmental Protection.).
251. Brannan Interview, supra note 97 (describing how Region II officials have become directly involved in administering the community right-to-know rules in Humboldt County after state officials perceived an unwillingness on the part of local officials to regulate paper companies).
252. Shabecoff, supra note 213, at A14, col. 1.
253. Id.
254. Id.
many state and local governments impose a patchwork of lower threshold quantities. On the other hand, if EPA does lower the threshold quantity, it may be criticized by industry groups and planners for generating useless reports and encouraging massive noncompliance by small businesses that cannot afford to comply with the reporting requirements. In either event, the tension between the right-to-know system’s commitment to efficient emergency planning and the burden of comprehensive information gathering will probably cause political and administrative problems for EPA in the future.

In addition, the tension between the various purposes of the community right-to-know system is likely to create greater problems as time goes on. In order to lower the high cost of compliance, eliminate the problem of conflicting advice from different agencies, and limit redundancy in reporting, government officials probably will attempt to standardize the community right-to-know process. But which plans will be adopted as the standard and which will be discarded? At present, the same loose-knit administrative structure that allows the problems of conflicting advice and redundant reporting also allows federal, state, and local agencies to pursue, albeit awkwardly, different purposes through the administration of the right-to-know program. The price of uniformity and efficiency in the community right-to-know program will include the sacrifice of some agency autonomy to emphasize particular goals. It will also involve difficult political and administrative choices as to which purposes should be given the highest priority.

C. Professionalizing the Community’s Right-to-Know

While the community right-to-know system has not performed to its full potential, it has by no means been a complete failure. Some businesses are reporting. These reports contain some useful information. This information plays a role in emergency plans and public debates that, for all their flaws, are better than the paucity of plans and debates that preceded the enactment of the community right-to-know laws.

This partial success, however, is not completely attributable to the design of the system for gathering and utilizing right-to-know reports. Rather, the implementation of the community right-to-know program has created a class of specialized professionals in both the public and private sectors of the economy. As described below, this class of professionals has served the purposes of the right-to-know systems by supplementing, modifying, and occasionally ignoring the regulatory structure set out in the rules.

The implementation of the right-to-know system has substantially increased the number of government employees devoted to hazardous materials regulation and safety planning. Prior to the implementation of California’s right-to-know rules, the OES had two staff members devoted
to hazardous materials management.²⁵⁵ Now the OES has twenty-three staff members devoted both to implementing the right-to-know rules and developing safety plans.²⁵⁶ Federal and local governments have carried out similar expansions. By 1989, EPA was expected to have 170 staff members responsible for implementing EPCRA. The City of Berkeley has two full-time staff members devoted to implementing the right-to-know rules and developing safety plans.²⁵⁷

While there are no hard figures, there are indirect indications that the number of right-to-know specialists working in the private sector has also expanded dramatically. In California alone there have been hundreds of seminars and conferences on how to comply efficiently and effectively with the community right-to-know rules.²⁵⁸ There are now two trade newspapers devoted entirely to hazardous materials regulation in California²⁵⁹ and one national trade paper focused completely on right-to-know.²⁶⁰ Privately published right-to-know compliance manuals have become commonplace.²⁶¹ Finally, state and local enforcement officials believe most businesses that have complied with the community right-to-know rules have done so by hiring a right-to-know specialist, either as a full-time employee or as a consultant.²⁶²

Right-to-know specialists have confronted the purposes and problems of the right-to-know system and have begun to develop creative solutions to the problems of the right-to-know system that go beyond the administrative framework called for by the legal rules. The greatest improvements have come in the area of reporting.

²⁵⁵ Brannan Interview, supra note 97.
²⁵⁶ Id. (16 staff members have been added at the six regional OES offices and seven have been added at OES’s head office in Sacramento).
²⁵⁷ Implementation Hearings, supra note 192, at 53 (EPA staff); Johnson Interview, supra note 97 (Berkeley staff).
²⁵⁸ Seminars are advertised in trade papers specializing in hazardous materials regulation.
²⁵⁹ The leading trade papers focused on California regulation, including right-to-know, are Haznet and Toxic News, both of which are published by Capitol Reports, 921 11th St., Suite 701, Sacramento, Cal. 95814.
²⁶⁰ Community and Worker Right-to-Know News (Thompson Publishing Group, P.O. Box 76927, Washington, D.C. 20013).
²⁶² Johnson Interview, supra note 97; Brannan Interview, supra note 97; Burton Interview, supra note 100.
The right-to-know rules envision a reporting system similar to the one used by the Internal Revenue Service for income tax returns: each business files an individual paper report that is individually reviewed by officials. This method of information management is time consuming, hence the quantity problem, and atomizes the data, hence the problem of information that is confusing and lacks context. Right-to-know and emergency-planning specialists have begun to substitute computer database management for the system of individual reports envisioned by the community right-to-know rules. The best example of the role of computer information management in the right-to-know program is the Computer Aided Management of Emergency Operations (CAMEO).

The CAMEO system was developed by the National Oceanic and Atmospheric Administration (NOAA); working in conjunction with EPA and firefighters specializing in hazardous materials emergencies. Within a fully implemented CAMEO system, reports are never, or at least very rarely, read individually. Rather, computer form readers are used to input reported information directly into a computer database. Also input into the database are facts about the community, such as transportation routes, residential patterns, and weather patterns, along with a certain amount of scientific information, such as the health risks posed by chemicals known to be commonly used in the community. This system allows government officials and the public to use computer programs to produce a small volume of meaningful information, rather than reading a large volume of separate reports. Citizens can directly search for gaseous hazards upwind from their homes, and government officials can model the effect of an accident on residential neighborhoods and plan evacuation routes without sifting through thousands of separate paper reports and manuals.

The CAMEO system is, however, not without its drawbacks. It is very new and has not been fully implemented. Large-scale implementation may reveal unexpected problems. Furthermore, CAMEO is ex-

263. Interview with Larry Keister, Hazardous Materials Response Branch, NOAA, Seattle, Washington, in Seattle, Washington (May 26, 1989) [hereinafter Keister Interview]. NOAA acts as scientific adviser to the Coast Guard and got into the business of managing hazardous materials when the Coast Guard asked it to develop a system for tracking the movement of hazardous materials through ports. Id. CAMEO was developed to aid what is, in essence, a port right-to-know and emergency-planning system. When EPCRA was passed, NOAA personnel recognized the applicability of their computer system to community right-to-know and contacted EPA. Id. With the assistance of EPA and professional firefighters, CAMEO was modified for more general use. Id.

264. The CAMEO system comes with health risk data and emergency response information for 2,600 common chemicals loaded into its data base. Administering officials can add to or subtract from this initial data package. Id.

265. California's OES is currently revising its model inventory reporting form to render it compatible with CAMEO, and many administering agencies are expected to install the CAMEO system when the new model form is promulgated sometime in the summer of 1989. Burton Interview, supra note 100.
pensive. The CAMEO software itself is only a few hundred dollars, but full implementation of the CAMEO system requires expensive hardware, including computer form readers and radio-linked CAMEO terminals for response vehicles, as well as time and money to train government personnel to use the hardware.

CAMEO is not the only form of computer aided database management used in the right-to-know system. Sometime during the summer of 1989, EPA will allow the public on-line access to hazardous material release report data gathered under section 313 of EPCRA.266 State officials, who already have access, indicated that EPA’s system provides benefits comparable to CAMEO’s. With the aid of computers, a large database that no one wants to read can be converted into a small meaningful description of, for example, all sources releasing a particular chemical in Alameda County, or the ten largest releasers in northern California.267

As described above, California’s community right-to-know law does not encourage substantial public participation.268 LEPC’s are the only forums where citizen and business participation is required, and there are only six of these in the state.269 Nonetheless, right-to-know specialists working for industry and for environmental interest groups have established a substantial hazardous materials dialogue.

Specialists working for chemical manufacturers have been particularly active. The Chemical Manufacturer’s Association has started a nationwide Community Awareness and Emergency Response program (CAER).270 The CAER program has pushed chemical companies to form local CAER groups, which meet regularly to discuss hazardous materials regulation and to which local officials and the public are often invited.

In addition to the CAER program, the Chemical Manufacturer’s Association has urged all of its members to supplement community right-to-know reports with additional health risk information.271 A large number of businesses have taken the Association’s advice seriously. One private survey suggests that roughly fifty percent of the companies reporting have hired public relations specialists and have supplemented right-to-know reports with community relations programs including in-

267. Rydbrink Interview, supra note 187.
268. See supra note 242.
269. See supra note 155 and accompanying text.
270. CHEMICAL MANUFACTURER’S ASSOCIATION, COMMUNITY EMERGENCY RESPONSE EXERCISES 1 (1986).
formational handouts, videotapes of safety efforts, and public opinion surveys.\textsuperscript{272}

The efforts of the chemical manufacturers have been supplemented by the activities of a second group, private public interest organizations. A number of public interest groups have developed expertise in the area of community right-to-know.\textsuperscript{273} These groups have raised public awareness of hazardous materials and community right-to-know laws through headline-grabbing interpretations of reported data. These same efforts have also helped to support political action. Environmental groups have made the most effective use of release information reported under section 313 of EPCRA. The National Wildlife Federation, working with Representative Henry Waxman, recently used the reported release of 2.4 billion pounds of toxics into the air to press for stricter air toxics controls.\textsuperscript{274} OMB Watch, the Environmental Policy Institute, the Natural Resources Defense Council, and the Sierra Club have similarly used the section 313 release reports to push hazardous materials issues into the public eye and to lobby for stricter toxics regulations.\textsuperscript{275}

At first glance, the community right-to-know program appears to have been most effective in the area of emergency planning. While nationally only sixty percent of LEPC's submitted emergency response plans on time,\textsuperscript{276} all six of the California LEPC's submitted plans by EPA's October 17 deadline.\textsuperscript{277} Moreover, under state and local laws, most reporting businesses have developed business safety plans, local administering agencies have developed area plans, OES regional offices have developed regional plans, and the OES head office has developed a hazardous materials emergency response plan for the entire state.\textsuperscript{278}

\begin{itemize}
\item \textsuperscript{272} Survey Indicates Firms Unprepared for Inquiries Under Right-to-Know Statute, BNA Env't Daily (Aug. 25, 1988) (WESTLAW BNA-END).
\item \textsuperscript{274} Congressmen, Environmentalists Urge Stricter Air Toxics Control Legislation, BNA Env't Daily (Mar. 24, 1989) (WESTLAW BNA-END).
\item \textsuperscript{276} EPA Letter Details Progress in Implementing Right-to-Know Act, BNA Env't Daily (Oct. 26, 1988) (WESTLAW BNA-END).
\item \textsuperscript{277} Burton Interview, supra note 100.
\item \textsuperscript{278} See supra notes 132-51 and accompanying text (rules requiring these plans); Steele Interview, supra note 34.
\end{itemize}
This appearance of effectiveness, however, is misleading in a number of ways. First, as discussed earlier, these plans are based on reported information that is incomplete and often inaccurate. Thus, while they are certainly better than no plans at all, these plans cannot be completely trusted.

Second, to the extent that the plans provide effective safety measures, they do so primarily because of the personal knowledge and expertise of the right-to-know specialists who drafted them, not because of the specific reports upon which the plans are theoretically based. The reports are too voluminous to read in their original form, and often too inscrutable and inaccurate to merit the tremendous effort a full reading would require. OES officials who draw up regional and state plans refuse even to maintain report files and send all the reported information they receive to local administering agencies to cope with as best they can.

Finally, community right-to-know specialists have developed a common universe of concepts and procedures that makes effective implementation of the plans in actual emergencies possible. Every government official interviewed for this Comment indicated that the community right-to-know system was a benefit to the community.

CONCLUSION: THE CHOICE BETWEEN POLITICS AND PROFESSIONALISM

The community right-to-know system was legislated into a void. With little or no idea of how and where hazardous materials were being used, legislators developed a system of reporting, emergency planning, and public participation that has had, on the whole, a beneficial effect. 40,000 California businesses now report their use of hazardous materials and develop at least rudimentary plans for responding to an emergency. Officials at the federal, state, and local level are now involved in planning for hazardous materials emergencies. With new computer aids, the right-to-know reporting system will provide a valuable informational basis for safety planning and political dialogue.

279. See supra notes 191-221 and accompanying text.
280. Every official illustrated the benefit by telling the same story; only the names changed with each retelling. As the story goes, there has been an accidental release of hazardous materials. The official rushes to the scene and sees an unidentified substance. Before the implementation of the community right-to-know system, the presence of the material would paralyze emergency response efforts. Now, the emergency response team's hazardous materials specialist finds the business' specialist. These two specialists review the business plan or MSDS—which, as the story is told, they either do not remember or have not read before—and quickly develop an appropriate method for dealing with the particular hazard. The presence of two emergency response specialists with a common language and a shared set of tools provides an efficient and safe solution to a hazardous materials accident even if no prefabricated plan is followed.
The right-to-know system, however, has not been an unqualified success. The paper reporting system is unwieldy and confusing. The lack of integration of federal, state, and local rules into a single administrative structure has produced confusion and administrative conflicts that undermine the functioning of the entire community right-to-know system. Finally, no one has analyzed the system’s cost to determine the optimum level of reporting and planning.

With regard to the future, it seems clear that the system’s success will depend in large part on the emerging class of community right-to-know specialists. Their success at using the system to discover and respond to the unknown seems likely to continue. Through meetings and conferences, they are developing a consensus as to which reporting systems are most efficient, which planning methods are most effective, and what disclosure of reported information is appropriate. This professional consensus may push localities to adopt uniform reporting forms and eliminate the need to file substantially redundant reports simply to account for minor local reporting variations. It will also eliminate or lessen conflicts between federal, state, and local officials who will be pushed to develop a common interpretation of the rules and purposes of the community right-to-know system.

The benefits of efficiency and uniformity, however, are by no means the only benefits originally sought by the political movement that championed the community right-to-know system. The political movement embraced the technician’s need for information and planning, but it also encompassed the belief that businesses that handle hazardous materials need to be brought within the political control of the community. Perhaps ironically, the same professional tools and concepts that render the system easier to administer diminish local control. The present system is often confusing and contradictory precisely because different localities have different political priorities with regard to hazardous materials management.

The tradeoff between local control of hazardous materials and efficient reporting and planning is a difficult one to assess, particularly since the choice remains to a great extent in the future. While it is not the aim of this Comment to debate the choice fully, there are one or two good reasons for favoring a pluralistic, locally controlled system.

While it might be argued that a technocratic and bureaucratic right-to-know program is a political improvement, the argument is unpersua-

281. Hints of such a consensus are appearing in California. The wide popularity of the CAMEO system has led California’s OES to revise its inventory reporting system to render it compatible with CAMEO, and Berkeley officials plan to carry out a similar revision once the state forms are published. Johnson Interview, supra note 97. Even before the appearance of CAMEO, a number of administering agencies in southern California had agreed to adopt uniform reporting forms. Brannan Interview, supra note 97.
sive for a number of reasons. First, a locally controlled system is less susceptible to industry capture. It is possible that one or two large corporations could capture a few local administering agencies; however, it is unlikely that they could capture all 129 of the local agencies currently operating in California. Indeed, it is at least as likely, perhaps more, that large chemical companies, which employ a large number of right-to-know specialists themselves, will use their economic power to capture the bureaucrats and technocrats. The dispersal of power to local agencies makes it more difficult, not easier, for large companies to gain inordinate influence over the regulatory process.

Second, if we are going to risk having an agency captured by a large corporation, and this risk is unavoidable, it should be an agency that is subject to local political restraints. Then, if a local agency is captured, the extent to which it can exercise undue influence will be limited by local political forces.

It might also be argued that because hazardous materials management is a very technical business, professionals understand the risks and proper responses better than the public. Again, there is some truth in this argument, but it is not persuasive. Professionals probably do understand hazardous materials better than the public. But there is a political value in local decisionmaking—especially where threats to the life and health of the public are at stake—that may override the technical advantages of professionalism. Our physical well-being is a matter of intense personal interest to all of us. Where personal health is at stake, it may be more important to let people decide for themselves than it is to make marginal gains in safety and efficiency.

Finally, it might be argued that the public has an inadequate attention span; consequently, professional management of the community right-to-know system is inevitable as the public and private professionals become the only citizens with a full-time interest in community right-to-know. This practical political argument may turn out to be regrettably correct. While experts in public interest groups like the Sierra Club have only recently discovered the community right-to-know system, the general public has apparently already forgotten it. Only six citizens with a general interest in hazardous materials inspected reports in Berkeley in 1988.282 Although many other requests were received by the city, virtually all of these came from business people who were buying property in Berkeley and felt required to check the right-to-know files as part of their due diligence.283 Berkeley’s experience is typical. Jim Markis of EPA

282. Johnson Interview, supra note 97.
283. Id.
has described public apathy as a national problem: "The public may [now] have a right to know, but they don't have a will to know." 284

An argument for professionalism based on public apathy has surprising power: Why go to the trouble of maintaining a local political forum when none of the local citizens have any interest in the politics of hazardous materials? The apathy, however, did not arise independently. How could the public respond with anything but apathy to one of the most arcane legal and administrative systems in the area of environmental regulation? If reported information was accessible and meaningfully organized, rather than inaccessible and confusing; if LEPC's were truly local, rather than hundreds of miles away; and if emergency planning involved the public in exercises, inspections, and planning decisions, then the public might take an interest.

In an important sense, the political role of the community right-to-know system remains to be chosen, if not created, by the administrators who are now creating so many other aspects of the right-to-know system. Opting to exclude the public would be, at best, inconsistent with the grassroots political origins of the right-to-know rules. Opting to include the public could create an administrative forum for a public dialogue that would be capable of confronting the difficult choices involved in hazardous materials management.