Enhancing the Public's Right-to-Know about Environmental Issues

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ENHANCING THE PUBLIC’S RIGHT-TO-KNOW ABOUT ENVIRONMENTAL ISSUES†

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I. INTRODUCTION

THE 1986 Emergency Planning and Community Right-to-Know Act (EPCRA)¹ has demonstrated the usefulness of public access to environmental and public health data. The Environmental Protection Agency’s (EPA) implementation of this statute has shown, first, that the public, once fully informed, can play an invaluable role in reducing toxic pollution, and second, that newer information technologies, such as computer telecommunications, are essential to the effective management of information resources. In a democratic society, information is power. Computer technology can help ensure equal access to important environmental information.

† The authors wish to express special appreciation to Patricia Bauman for her continuing input and advice on these issues. Although Ms. Bauman is not listed as an author, many of her ideas are laced throughout this article. Thanks also should be extended to John Chelen, David Hawkins and Blake Early for their help in thinking through the ideas for this article.

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Ms. MacLean is OMB Watch’s environmental editor and project director of RTK NET, the Right-to-Know Computer Network. RTK NET, a joint project of OMB Watch and Unison Institute, provides, among other things, computerized public access to the Toxics Release Inventory.

EPCRA's section 313 mandates that EPA provide public access, by computer telecommunications and other means, to all annual information collected from industry on routine releases of toxic chemicals to air, land, and water.\(^2\) EPCRA was the first statute to require a publicly accessible online computer system. This approach, labeled the Toxic Release Inventory (TRI), has been reviewed as a public access model by Congress, EPA, environmentalists, and those concerned about access to government information.\(^3\) While improvements can be made to the TRI public access approach,\(^4\) experience in using TRI information has shown that additional environmental and public health information should be made available to the public. Using telecommunications and other electronic means is indispensable in achieving that goal.

More specifically, improved information collection, mandated dissemination of information, and presentation of data in ways that support analysis and public understanding will assist efforts to protect the environment. At this time, however, such dissemination standards have not been implemented. Public access to environmental information needs to be continuously expanded and strengthened to increase public involvement in setting and achieving environmental objectives. In addition, an ongoing and timely release of information and identification of effective distribution channels is needed to improve the information's usefulness once it has been collected.

Unfortunately, more efficient dissemination standards are still not enough. The data must be presented in user friendly form as well, for instance, by cross-linking databases. EPA currently maintains hundreds of databases, but few, if any, are cross-linked. As a result, much important data may be unusable, as well as redundant or in conflict with data that is usable. This situation adds costs to businesses, creates confusion for the public, and presents difficulties for policy makers. Improvements in cross-linking and integrating data by facility, respondent, chemical, media (such as air, water, and land), geography, ethnicity, socio-economic class, health effects, and other demographics are critical to environmental and public health protection.

3. To our knowledge it remains the only law that requires public access to "any person" through computer telecommunications and other means.
4. EPCRA § 312, 42 U.S.C. § 11022. Section 312(a) of EPCRA gives the basic requirements for "Emergency and hazardous chemical inventory."
An internal EPA report stated that single-medium, end-of-pipe controls are not a solution by themselves because pollutants thought to be controlled under one medium emerged as a problem transferred to another medium. Without cross-linking data, the "shell game" could go on forever, but, again, data linkage alone will not solve the problems. EPA must use this new strategic vision of information management and respond with coordinated regulations intended to reduce the burden on industry and maximize public and EPA understanding of environmental conditions. A unified approach is important because improved management of information will provide opportunities to anticipate problems before they become overwhelming.

Public access is more than just providing information to the public. Public access is also a way to get added resources to EPA personnel to help carry out their missions. And, if the public is defined to include government, public access can improve the management of government.

But improved management of information is also not enough. The public needs to be trained to access this data and to use this information to assist EPA in its mission to protect the environment. Presenting information in a manner that facilitates understanding and analysis by the public is essential to democratic right-to-know principles. To achieve the goals of right-to-know principles, EPA needs to test alternative ways to provide information to the public and to maximize the use of newer information technologies.

This article describes experiences using EPCRA data and prescribes a right-to-know agenda that could be implemented by EPA. This agenda calls for establishing agency-wide public access principles, making sources of information beyond those authorized by EPCRA available to the public, and compelling EPA to begin pilot approaches to improve the cross-linkage and integration of separate databases. As a first step, our agenda requires EPA to identify, and make available to the public, data about different information products and services operated by EPA and other agencies which affect the environment and public health.

6. Id. For example, pollutants removed from the air may subsequently be placed in a landfill.
EPA has taken the first step in compiling such a directory with the print release of its Information Resources Directory.

We envision EPA expanding the Information Resources Directory by providing details about each of the information products and services, their public availability, and how the data can be accessed. This new directory would be updated at least once a year, and a pilot approach would be initiated to make the information available through computer telecommunications and other means, such as computer diskettes and CD-ROMS.

To assist EPA in establishing a public access program, the public must be involved in all steps of the process, from planning through implementation. Our agenda calls for EPA to establish a public access task force to review the agency's public access efforts and recommend types of data that should be made publicly available. The task force would also review efforts to integrate different EPA databases and recommend improvements.

It is very important that EPA initiate several pilot approaches beyond TRI to use newer information technologies in disseminating environmental and public health data to the public. New pilot approaches would involve using electronic mail and conferencing, geographical information systems, and relational databases. Emphasis would be placed on making such pilot approaches user friendly by different sectors of the public, including the lay public. The pilot approaches could also focus on the emerging policy agendas of the Clinton Administration, such as pursuing environmental justice and cross-media enforcement.

This paper presents several important principles that we believe EPA must follow; however, two principles are especially significant. First, EPA must, where permitted by law, revise its policies regarding public access to claims of trade secrets and confidential business information. Policy revisions should follow those prescribed in EPCRA, the right-to-know law, which assumes

7. Details such as a description of information systems and the contents or data elements within such systems could be supplied to the public by EPA.
8. The task force should be comprised of representatives of groups that use environmental and public health data.
9. Relational databases, such as the computer software dBase, store information in two-dimensional tables (in rows and columns, as in a spreadsheet). These programs can work with two or more files at the same time through links established by common fields and various programming procedures. Such software allows users to compare and contrast information from different tables, or even different databases, that have related fields.
10. Cross-media enforcement refers to ensuring that pollutants are not just transferred from one medium to another.
a presumption against secrecy until the claimant can demonstrate the need for secrecy.11 Second, EPA must establish a user fee policy, including provisions for handling fee waivers and reduced fees, that promotes public access. The payment of fees should never become an obstacle to obtaining public information, or we risk becoming a society of the information "haves" and "have-nots."

II. BACKGROUND ON THE TOXIC RELEASE INVENTORY

A. The Emergency Planning Community Right-to-Know Act

In 1986, Congress reauthorized the Comprehensive Environmental Response, Compensation, and Liability Act of 198012 (more commonly known as Superfund) and added Title III, the Emergency Planning and Community Right-to-Know Act of 1986.13 EPCRA requires companies to plan for emergencies and to publicize information concerning the uses and releases of toxic chemicals.14

A dramatic illustration of the need for such legislation was the chemical gas leak in Institute, West Virginia. When residents smelled the unmistakable odor of chemicals coming from the nearby Union Carbide plant, they knew something was amiss. Despite an elaborate system of emergency sirens and warning, 150 people were injured in August 1985, when a toxic cloud drifted over Institute and three neighboring communities.15 Some residents smelled the gas well before the warning siren sounded.16 Other residents first saw the huge cloud of gas and then heard the warning sirens.17

The accident was caused by a leak in a 500-gallon storage tank, which allowed a chemical used to make pesticides to escape into the air.18 Ironically, Union Carbide had closed the plant for

16. Id.
17. Anndee Hochmann, Plant Delayed Warning Citizens of Gas Leak, Wash. Post, Aug. 13, 1985, at A1. One resident said he was playing tennis when he saw "a beautiful white cloud, about 100 feet wide and 200 feet high," then heard the plant warning sirens. Id.
18. Id.
five months the year before and spent more than $5 million to prevent an accident like the one that killed over 2000 people at its Bhopal, India plant.19

What went wrong at Institute? Why didn’t the warning system alert community residents of the danger immediately after the leak? Why were they told to stay indoors where the chemical would accumulate? Clearly, the emergency planning process was seriously flawed, "endangering residents in four communities. The incident at Institute typifies the many accidental chemical releases that occur around the country each day. Between the years of 1980-1985 there were approximately 7000 accidents involving hazardous chemicals reported.20 These accidents killed 140 people, injured nearly 4700 more, and forced the evacuation of roughly 217,000 others.21

In October 1986, Congress responded to these concerns by passing EPCRA.22 The law takes emergency planning out from behind closed doors and guarantees the public a key role in assessing the dangers of hazardous materials and emergency planning for chemical accidents.23 EPCRA established publicly comprised committees charged with emergency planning.24 Under EPCRA, each state must set up a State Emergency Response Commission (SERC), which is responsible for establishing and coordinating Local Emergency Planning Committees (LEPC).25 The LEPCs must evaluate local chemical hazards and plan for chemical accidents.26 LEPCs must also develop a local emergency plan using information provided by facilities that use certain Extremely Hazardous Substances.27 Facilities covered by the law must report emergency releases of certain chemicals to the SERC and LEPC if the release exceeds a reportable quan-

21. Id.
23. EPCRA § 301(a), 42 U.S.C. § 11001(a) (providing for establishment of committees to respond to public inquiries about hazardous waste).
24. Id.
25. Id.
tity.\textsuperscript{28} The law also provides funding to train emergency re-
sponse personnel and review emergency systems.\textsuperscript{29}

EPCRA allows citizens to participate in local chemical hazard
planning. Each LEPC must include representatives from fourteen
groups, including “elected State and local officials; law enforce-
ment, civil defense, firefighting, first aid, health, local environ-
mental, hospital, and transportation personnel; broadcast and
print media; community groups; and owners and operators of fa-
cilities . . . .”\textsuperscript{30} Any person may petition the SERC to modify the
membership of an LEPC.\textsuperscript{31}

Congress also intended that the statute provide citizens with
information about the routine use of chemicals in the commu-
nity.\textsuperscript{32} Two sections elaborate this community right-to-know com-
ponent.\textsuperscript{33} First, facilities must report chemicals held on-site
to the SERC, LEPC, and local fire department.\textsuperscript{34} These are the
same chemicals for which employers maintain Material Safety
Data Sheets (MSDS) as required by the Occupational Safety and
Health Act (OSHA).\textsuperscript{35} Anyone can request copies or lists of
MSDSs held by a facility that uses a certain threshold level of a
chemical at any one time.\textsuperscript{36} Second, companies must also file
chemical inventory information.\textsuperscript{37} The inventory, known as Tier
I, includes general information on the quantity and location of
OSHA-regulated hazardous chemicals handled and stored on-
site.\textsuperscript{38} SERCs, LEPCs, or local fire departments can request that
a more detailed Tier II inventory form be submitted to them by
manufacturers.\textsuperscript{39} The same entities are also empowered to re-
quest any additional information they may need in order to de-
velop their emergency response plan.\textsuperscript{40}

The section of EPCRA that received the least public attention
during passage is now, ironically, perhaps the best known. Sec-
tion 313 calls for EPA to collect yearly records of manufactur-

\begin{itemize}
\item \textsuperscript{28} EPCRA § 304, 42 U.S.C. § 11004.
\item \textsuperscript{29} EPCRA §§ 301-305, 42 U.S.C. §§ 11001-11005.
\item \textsuperscript{30} EPCRA § 301(c), 42 U.S.C. § 11001(c).
\item \textsuperscript{31} EPCRA § 301(d), 42 U.S.C. § 11001(d).
\item \textsuperscript{32} EPCRA §§ 311-312, 42 U.S.C. §§ 11021-11022.
\item \textsuperscript{33} Id.
\item \textsuperscript{34} EPCRA § 311(a)(1), 42 U.S.C. § 11021(a)(1).
\item \textsuperscript{36} EPCRA § 311(c), 42 U.S.C. § 11021(c).
\item \textsuperscript{37} EPCRA § 312(a)(1), 42 U.S.C. § 11022(a)(1).
\item \textsuperscript{38} EPCRA § 312(d)(1)(B), 42 U.S.C. § 11022(d)(1)(B).
\item \textsuperscript{39} EPCRA § 312(e)(1), 42 U.S.C. § 11022(e)(1).
\item \textsuperscript{40} EPCRA § 312(d)(1), 42 U.S.C. § 11022(d)(1).
\end{itemize}
releases of toxic chemicals. The reports filed by manufacturers outline releases to air, land, surface water and deep-injection wells, as well as transfers to sewers, incinerators, and landfills. The reports are collected by state officials and EPA. The resulting inventory is the first publicly accessible, on-line computer database ever mandated by a federal statute. TRI mandates reporting by a facility that, first, falls within Standard Industrial Classifications (SIC codes) 20-39, which cover manufacturing facilities; second, employs ten or more full time workers; and, finally, manufactures, processes, or imports over 25,000 pounds or otherwise uses over 10,000 pounds of a listed right-to-know chemical in a calendar year.

EPCRA also penalizes companies that do not comply; allows citizens to enforce the law; exempts transportation of chemicals; and omits federal facilities.

B. Implementation of TRI

In the late 1980's, it was difficult to assess the extent of pollution caused by corporations in the United States. When House Representative Henry Waxman estimated the chemical industry's toxic air emissions at 85 million pounds, corporate executives claimed his figures were invalid. However, data collected by the federal government starting in 1988 revealed the magnitude of toxic air pollution to be even greater than Waxman first

41. EPCRA § 313, 42 U.S.C. § 11023.
42. EPCRA § 313(a), 42 U.S.C. § 11023(a).
43. Id.
44. EPCRA § 313(b), 42 U.S.C. § 11023(b).
47. EPCRA § 327, 42 U.S.C. § 11047. Transportation of chemicals is exempt except when emergency notification is required under § 304. EPCRA § 304, 42 U.S.C. § 11004.
49. PAUL ORUM & ALAIR MACLEAN, PROGRESS REPORT: COMMUNITY RIGHT-TO-KNOW (WORKING GROUP ON COMMUNITY RIGHT-TO-KNOW) 14 (July 1992). The Working Group on Community Right-to-Know is an ad hoc and cohesive group of environmental and public interest organizations working to promote citizens' right-to-know about toxic pollution. To obtain more information, contact:

Working Group on Community Right-to-Know
U.S. PIRG Education Fund
215 Pennsylvania Avenue, S.E.
Washington, DC 20003
(202) 546-9707
thought.\footnote{Id. The actual pollution release figures revealed by TRI dwarfed Representative Waxman’s estimates. While Waxman surmised toxic air emissions to approximate 85 million pounds, actual TRI reported emissions exceeded several billion pounds. See Sanford J. Lewis, Citizens as Regulators of Local Polluters and Toxics Users, New Solutions, Spring 1990, at 20-21.}

Even with TRI, citizens find it difficult to access and interpret the wealth of environmental information available from the government. For instance, too much information can make it difficult for the user to find the particular date needed. This problem was encountered by John Burns of the Southern Maine Toxics Campaign.

Until [January 1992], [the Southern Maine Toxics Campaign] had been frustrated in trying to learn about local polluters. Often Local Emergency Planning Commissions and company executives, despite statutory requirements under the Right-to-Know Law, ignored us. And when the authorities finally did release the information we requested, they buried us in needless piles of paperwork.\footnote{John Burns, No More Needless Piles of Paperwork, ONLINE: RTK NET NEWSL. (RTK NET, Wash., D.C.), Summer 1992, at 1.}

With a computer, modem, and access to a telephone line, anyone can now find out, for example, that in 1990, the French-based multinational Rhone-Poulenc owned a factory in St. Joseph, Missouri, that reported sending 10,200 pounds of the potentially cancer-causing herbicide 2,4-D to be incinerated in El Dorado, Arkansas, by Ensco, Incorporated.\footnote{Search of RTK NET database, OMB Watch & Unison Institute, Washington, D.C. (search of FACILITY records containing “RHONE*” in FACILITY NAME field, “ALL” in CITY field, “MO” in STATE field, “1990” in YEAR field, and “ALL” in TRI ID field).

OMB Watch is a non-profit public interest group that advocates for the public’s right-to-know and greater government accountability. The Unison Institute is a center for computer systems and software technology in the public interest. For more information, contact:

OMB Watch
1731 Connecticut Avenue N.W.
Washington, DC 20009
(202) 234-8494.}
The factory also reported sending 5290 pounds of this chemical to the St. Joseph sewage treatment plant.\footnote{Id. This information about Rhone-Poulenc was collected, computerized, and made available to the
public by EPA as required by EPCRA.\textsuperscript{54}

On June 19, 1989, more than two and one-half years after the law passed, EPA opened the telephone lines to its database, then housed at the National Library of Medicine.\textsuperscript{55} Covered facilities must submit their TRI forms by July 1 of each year.\textsuperscript{56} TRI includes information about a facility’s releases of more than 300 chemicals to air, land, and water, as well as transfers to off-site facilities, like incinerators or sewage treatment plants.\textsuperscript{57} In 1990, Congress expanded the amount of information that is collected in order to better assess attempts by industry to reduce pollution of toxic chemicals covered under TRI.\textsuperscript{58} A little less than one year after facilities submit their TRI, EPA updates its publicly accessible database, makes the information available in a printed report, and supplies copies of the data in electronic formats.\textsuperscript{59}

TRI information can be combined in a variety of ways to identify top polluters and polluting chemicals, detect geographic patterns of pollution, or analyze pollution coming into an incinerator, landfill, or sewer. The importance of TRI is hard to overestimate. Indeed, its value has already been demonstrated repeatedly in influencing industry behavior, public policies, and

\textsuperscript{54} EPCRA § 313(j), 42 U.S.C. § 11023(j). EPCRA’s requirements for the management of data are as follows:

The Administrator shall establish and maintain in a computer database a national toxic chemical inventory based on data submitted to the Administrator under this section. The Administrator shall make these data accessible by computer telecommunication and other means to any person on a cost reimbursable basis.

\textit{Id.}

\textsuperscript{55} Two case histories provide helpful insight on the steps involved in EPA’s development of its public access plan through the National Library of Medicine. \textit{See} Susan Rosegrant, \textit{The Toxics Release Inventory: Sharing Government Information with the Public} (1992) (Program on Strategic Computing and Telecommunications in the Public Sector, John F. Kennedy School of Government, Harvard University) (on file with authors); Benton Found., \textit{Electronic Public Access: A Case Study of EPA’s Toxics Release Inventory} (1990) (draft) (on file with authors) [hereinafter Benton Found.].

\textsuperscript{56} EPCRA § 313(a), 42 U.S.C. § 11023(a).

\textsuperscript{57} EPCRA § 313(c)-(e), 42 U.S.C. § 11023 (c)-(e). The statute guides facilities by providing threshold amounts for reporting as well as the types of substances required to be reported. \textit{Id.}


\textsuperscript{59} 42 U.S.C. § 13106(e). The PPA provides that data collected shall be made available in the same manner as 42 U.S.C. § 11023. \textit{Id.} The information from the TRI is available on electronic formats such as diskettes, CD-ROMs, and magnetic tape.
public education. 60

EPCRA does not compel manufacturers to reduce pollution, but TRI can be an important aid to regulatory programs that require pollution reduction. For example, California Attorney General John Van de Camp used TRI reports to target the largest emitters of ethylene oxide for enforcement suits after the companies failed to warn surrounding communities as required by state law. 61 To escape litigation, the companies negotiated settlements that included commitments to reduce their toxic emissions. 62 To verify whether emissions were reduced, TRI information was used to track ethylene oxide emissions to California’s air and a reduction of sixty-six percent between 1987 and 1989 was found. 63

In general, citizen groups have used TRI data to produce reports that help educate the public and policy makers. 64 Some groups have been able to negotiate directly with local companies. 65 Other groups use the information gained from their reports to lobby for pollution prevention planning. 66 Some public

60. See infra notes 63-77 and accompanying text.
61. William Pease, Right-to-Know: Complement or Replacement?, ONLINE: THE RTK NET NEWSL. (RTK NET, Wash., D.C.), Fall 1991, at 1. The Attorney General for the state of California used TRI reports to enforce California’s Safe Drinking Water and Toxic Enforcement Act of 1986. This Act provides:
No person in the course of doing business shall knowingly discharge or release a chemical known to the state to cause cancer or reproductive toxicity into water or onto or into land where such chemical passes or probably will pass into any source of drinking water, notwithstanding any other provision or authorization of law except as provided in Section 25249.9.
CAL. HEALTH & SAFETY CODE § 25249.5 (West 1992). Section 25249.9 enumerates exemptions from discharge prohibited under § 25249.5. These exemptions include a grace period after regulated chemicals are identified and an exemption for approved de minimis releases. CAL. HEALTH & SAFETY CODE § 25249.9.
Notwithstanding Mr. Pease’s comments, Proposition 65, the initiative measure resulting in enactment of this law, was adopted by California voters on November 4, 1986 and became effective January 1, 1987. CAL. HEALTH & SAFETY CODE § 25249.5.
63. Id.
66. For “success stories” of citizen use of the right-to-know law, see NITA SETTINA & PAUL ORUM, CTR. FOR POLICY ALTERNATIVES AND WORKING GROUP ON
interest law firms, such as Atlantic States Legal Foundation in Syracuse, New York, track down companies that should be reporting but are not.\textsuperscript{67} Settlements with these companies often include a commitment to reduce pollution in the future.\textsuperscript{68}

Many of the citizens who use TRI data share a desire to change corporate decisions. The availability of TRI data has led to a shift of responsibility for environmental protection from government alone to government and citizens. It has further encouraged direct negotiation between concerned citizens and corporations.\textsuperscript{69} The sense of obligation between neighbors underlies one direct negotiation strategy — the “Good Neighbor Agreement” proposed by Sanford Lewis.\textsuperscript{70} Lewis’ argument is based on the theory that citizens and workers should view corporations as neighbors and apply similar standards of behavior to them.\textsuperscript{71} Corporations, as neighbors, should therefore not endanger the lives of the people with whom they share land, water and air.\textsuperscript{72}

\textbf{Community Right-to-Know, Making the Difference, Part II: More Uses of Right-to-Know in the Fight Against Toxics (1991); Jeffrey Tryens et al., The Nat’l Ctr. for Policy Alternatives, Making the Difference: Using the Right-to-Know in the Fight Against Toxics (1990).}

\textsuperscript{67} Settina & Orum, supra note 66, at 13-14. Atlantic States Legal Foundation (Atlantic States) used the citizen suit provisions of EPCRA § 326, to pursue polluters not reporting under TRI. In one action, Atlantic States sued Murray Sandblast & Paint of Buffalo, N.Y. The company settled with Atlantic States, pledging to reduce emissions and use less toxic substances in the manufacturing process. Incidentally, the company also realized financial savings from the changes agreed to in the settlement - a win for the community, environment, the company, and its workers. Id.

\textsuperscript{68} See id. at 7-8. In 1991, the residents of Boulder, Colorado, using information obtained through TRI, obtained a “good neighbor agreement” from Syntax Chemicals Corp. The agreement required Syntax to reduce reported toxic air emissions 50% by 1994. Id. In Massachusetts, a group of interested citizens pressured Raytheon Corp. to reduce ozone depleting emissions. TRI data exposed the severity of Raytheon’s pollution, enabling the Massachusetts Public Interest Research Group to target Raytheon for its transgressions upon the environment. Id. at 19.


\textsuperscript{70} See Lewis, supra note 50, at 20-21.

\textsuperscript{71} Id.

\textsuperscript{72} See id. Lewis calls his theory the “citizen-regulator” approach. This theory of regulation succeeds because “it places those with the biggest stake in safety at the front lines of the regulatory process.” Id. at 21. These citizen watchdogs can regulate more effectively, according to the theory, because they lack the bureaucratic dead weight that burdens government agencies. Citizens can organize media/publicity campaigns, boycotts, and pickets. If necessary, they may turn to government agencies for assistance. Id.
Journalists are also beginning to use TRI information. A preliminary review of 100 stories, all from large urban dailies, found that less than twenty percent of the reporters accessed the TRI database themselves.\textsuperscript{73} In many cases, reporters rely on the reports prepared by advocacy organizations.\textsuperscript{74}

For each of the four years that EPA has collected TRI forms, the total number of reported emissions has decreased.\textsuperscript{75} In many cases, the reported reductions may result from changes in the way companies report their emissions, as opposed to actual reductions in releases. For example, a Citizen’s Fund survey revealed that less than half of the top fifty facilities reporting reductions between 1989 and 1990 claimed that they had changed their manufacturing processes or reduced the use of chemicals, two possible ways to proportionately reduce chemical emissions.\textsuperscript{76} An earlier report by the National Wildlife Federation had similar findings.\textsuperscript{77}

In 1991, EPA initiated the “33/50” program.\textsuperscript{78} Under this voluntary program, EPA asks companies to reduce emissions of seventeen TRI chemicals thirty-three percent by 1992 and fifty percent by 1995.\textsuperscript{79} EPA representatives, however, have claimed that mandatory pollution prevention initiatives cannot be implemented until the “33/50” program has been given a chance to work.\textsuperscript{80}


\textsuperscript{76} Citizens Fund, Manufacturing Pollution: A Survey of the Nation’s Toxic Polluters 8-11 app. at XI (1992). The report noted that the main reasons for reductions in toxic emissions at the facilities that responded to inquiries were “changes by EPA in the chemical releases that had to be reported, changes in waste estimation techniques, lower levels of production, or other factors beyond the control of the facility . . . .” Id. at 8.

\textsuperscript{77} See Gerald V. Poje & Daniel M. Horowitz, Phantom Reductions: Tracking Toxic Trends 83 (1990) (manufacturing companies making commitments to reduce toxic chemical emissions).

\textsuperscript{78} 1990 TRI Data Release, supra note 75, at 206-07.

\textsuperscript{79} Id.

\textsuperscript{80} Office of Management and Budget, Denial of EPA’s Information Collection Request to Implement the Pollution Prevention Act, at 10 (Mar. 20, 1992); EPA Administrator William Reilly, Statement Before Senate Subcommittee on Environmental Protection, Committee on Environment and Public Works, (Sept. 17, 1991).
Unfortunately, corporations can move their operations to more hospitable locations when pressed for workplace and environmental concessions. Over the last two decades, while the United States’ population has grown, the number of high-paying, high-polluting manufacturing jobs has remained constant. At the same time, more and more Americans have come to work in low-paying, and low-polluting, service sector jobs. This form of relative mobility sometimes results in corporations failing to respond to direct negotiation. Corporate executives may refuse to negotiate when they are trying to sell a particular facility and, therefore, lack incentive to act as a neighbor, good or bad.

In addition, there is less accountability built into the relationships between citizens and corporations than between elected officials and those they represent. While members of Congress and state legislatures must respond to their constituents in order to get re-elected, corporate officers’ first responsibility is to their shareholders. Because many industrial corporations have factories in different places, relations between corporate management and residents near one factory may more closely resemble those between the owner of a nearby summer house and local residents than between year-round neighbors.

TRI is one tool that can be used to begin to address a variety of environmental, economic, and social justice issues. TRI data has already been used as grounds for negotiating with industry, a way of monitoring toxics use reduction, a way to influence program and policy development, a basis for presenting information to the press, and as an educational tool. When TRI is linked with other information, such as health and census data, the possibilities for its use increase enormously.

C. Limits to the Information

Anyone who works with TRI data is aware of its limitations. In 1988, an estimated 29,000 facilities should have reported, but only approximately 19,000 facilities actually did. There are even more facilities that are not required to report under EPCRA

82. Id.
83. See supra notes 64-74 and accompanying text.
84. For a discussion of the advantages of linking TRI data with other information, see infra Section III.B, Point 6.
although information from them is needed for a comprehensive picture of pollution in our communities. Only manufacturing companies report their toxic releases, leaving out such large chemical users as utilities and mines.86 Furthermore, federal facilities are not required to comply with EPCRA.87

The list of toxic chemicals that must be reported under EPCRA is very limited. Companies do not have to report some cancer-causing chemicals, such as benzo(A) pyrene.88 Many more potentially dangerous substances, such as ozone depleters or pesticides used in farming, go uncounted simply because they are not on the list of roughly 300 TRI chemicals.89 The public can petition EPA to add to or delete chemicals from the list of those that must be reported. But, based on the experience of the first five years of the program in which only seven chemicals were added to the TRI list, and ten were removed,90 it seems unlikely that the list will change dramatically in the near future.

Manufacturers report their own emissions based on their own estimates, and the reported emissions may, therefore, be underestimated. EPA requires no standardization in methods of estimation, creating wide variance in reporting between similar types of companies.91 Furthermore, there is little opportunity to verify the estimates that are reported. Actual formaldehyde emissions tests at a California factory owned by Louisiana-Pacific, for example, revealed that the company had only reported half the volume of their releases in 1989.92

The reported amount of toxic chemicals released is for the

86. EPCRA § 313(b)(1)(A), 42 U.S.C. § 11023(b)(1)(A). Facilities that meet three criteria are required to file TRI reports. The three items are: (1) the company has more than 10 employees; (2) the company is a manufacturing company; and (3) the volume of certain listed chemicals exceeds specified thresholds. Id.

87. See EPCRA § 329(7), 42 U.S.C. § 11049(7). Many of the Department of Energy facilities voluntarily file TRI reports, including the nuclear facility in Rocky Flats, Colorado. However, other government agencies, such as Department of Defense facilities, do not submit TRI forms.


89. For a complete list of the TRI chemicals, see Chemicals Subject to Section 313, supra note 88.


92. Settina & Orum, supra note 66, at 17.
calendar year with no indication of peak releases. For example, if a company released 10,000 pounds of benzene to the air, there is no way to know if small amounts were released throughout the year, or whether 8000 pounds of benzene were released in one week, with the remainder of the release spread out over the rest of the year. The lack of data on chemical releases measured over time makes it difficult to assess the actual chemical exposure, and therefore the health risk, of a community's residents. Thus, even with TRI data, the potential danger of the releases may not truly be known.

The Chemical Manufacturers Association (CMA), which represents the companies that accounted for forty-four percent of the volume of toxic chemicals reported to the TRI in 1990, has raised concerns about the public's understanding of TRI data. CMA claims that ordinary citizens lack the proper context to judge the danger posed by chemical releases. As CMA stated, "[t]he public has a right to understand what the [TRI] release data does, and does not, mean . . . . [t]he [TRI] program does not give them the type of information that is necessary to understand these actual risks."96

While CMA has validly pointed out that the data quality needs to be improved, industry fears about the misuse of TRI data have not materialized. There are, however, many uses for TRI data that were never contemplated when the statute was enacted. According to Liz Fisher, a CMA representative, Rohm & Haas has used the information concerning chemical emissions to find out about competitors' processes. Environmental groups have used the information for other purposes. However, as a whole, EPA, environmental groups, industry, and the media have done a good job explaining the limitations of TRI data.

93. EPCRA § 313(f)(1), 42 U.S.C. § 11023(f)(1). The threshold amounts of chemicals needed to trigger the third criteria for mandatory reporting are established on an annual basis. Id. For a discussion of the three criteria, see supra note 86.
94. 1990 TRI DATA RELEASE, supra note 75, at 154-57.
96. Id.
98. For a discussion of environmental groups' use of TRI data, see supra notes 64-74 and accompanying text.
A 1992 study commissioned by EPA to evaluate TRI concluded that TRI is "one of the most unusual and effective pieces of environmental legislation of the past twenty years." The TRI information is widely used by the public. Despite its success, TRI is not a panacea for environmental problems, and it is certainly not a substitute for government regulation and enforcement.

III. Developing An EPA Right-to-Know Agenda

A. Background

Since enactment of EPCRA, EPA has played a pivotal role in developing alternative approaches to disseminating information to the public. TRI has revolutionized EPA's operation because the agency now views itself as both a regulator and disseminator of environmental information. TRI's legacy is that information "has itself become an instrument of policy, identifying new concerns, and providing citizens a greater degree of participation in environmental policy making. Access to information — at first haphazard, then reluctantly guaranteed, then actively encouraged — has expanded the concept and practice of democracy by promoting greater public accountability." Experience with TRI has shown that public access assists EPA in achieving its mission of environmental protection in three distinct ways. First, the public becomes active in pursuing issues, such as pollution prevention, thus enriching the resource base of the agency. Second, public access helps EPA personnel pursue a more coordinated approach to enforcement and to understand what is occurring in other sections of the agency. Finally, public access improves data quality, thereby improving program enforcement.

As a result of these advantages, the Office of Pollution Prevention and Toxic Substances within EPA, which operates the TRI program, has been reviewing its plans to provide additional data beyond TRI to the public, particularly through computer telecommunications. In other parts of EPA, the Office of Info-

99. Lynn et al., supra note 74, at 1. The study was performed by the University of North Carolina.
100. See supra notes 64-74 and accompanying text.
102. A corporation's embarrassment over inaccurate data can be a useful tool.
information Resources Management has drafted a framework for agency-wide public access principles and procedures, and has been in the lead in working with other agencies to develop public access strategies. Additionally, other offices within EPA are exploring public access approaches, including the Office of Solid Waste and Emergency Response.103

House legislative efforts to make EPA a cabinet-level agency have included proposals to expand public access to environmental information.104 One bill included proposals to develop and maintain a comprehensive guide to EPA’s environmental information services, products and systems; develop new methods for cross-linking and integrating environmental data; study ways to use computer telecommunications for disseminating environmental information; and create an advisory committee to provide recommendations on other methods for improving public access to environmental information.105 Motivated in part by the Bush and Clinton Administrations’ support for making EPA a cabinet-level agency, as well as the likelihood that public access may become legislatively mandated, EPA officials have attempted to adopt an agency policy that parallels the anticipated legislation.

Although there have been active efforts to improve public access at EPA, the agency’s culture continues to favor secrecy over openness. Because of the way the agency was created and the legislative framework that defines its jurisdiction and programs, EPA as a whole has failed to recognize that an informed public can be a powerful ally. Moreover, EPA policies and attitudes that favor secrecy, such as trade secrecy provisions, also contribute to a lack of coordination within the agency.106 Program offices often do not know about critically relevant databases in other EPA offices, and, even if aware, are incapable of accessing the informa-

103. The Office of Solid Waste and Emergency Response (OSWER) joined with the National Oceanic and Atmospheric Administration in developing the Computer Assisted Management Emergency Operations (CAMEO). CAMEO is software that manages critical database information and is designed for emergency responders, such as plant managers, LEPC representatives, and fire fighters. The software merges the database information with mapping files available through the U.S. Census Bureau. OSWER remains interested in ways to maximize CAMEO’s potential for public use.


106. See Section III.B, Point 2.
tion. Efforts to promote cross-media analysis and enforcement are thwarted, and initiatives to streamline reporting burdens on industry are virtually stillborn. As a consequence, a comprehensive picture of environmental pollution in our communities remains unavailable. Finally, even when program offices do provide information, the information's usefulness is often undermined by a lack of timeliness and ineffective distribution channels.

A confluence of factors, including a new Administration, the emergence of newer information technologies, the success of the TRI, the threat of new legislation, and the commitment of some EPA officials to make public access a serious management concern, make this the perfect time to promote a comprehensive right-to-know agenda within EPA. The model that is developed and implemented by EPA can become the basis for applying right-to-know principles at other agencies at the federal and state levels. While there will be up-front costs to implement a comprehensive right-to-know agenda, the money expended will be cost effective because such an agenda will ultimately save business money, improve EPA program efficiency, and empower the public, thus promoting citizen involvement.

B. Right-to-Know Principles

The TRI and other public access initiatives have taught us that there are six key principles to a successful right-to-know agenda that must be adopted and supported by EPA.

1. **EPA Has an Affirmative Responsibility to Collect and Disseminate Information Which Furthers Public Health and Environmental Goals**

In 1985, the Office of Management and Budget (OMB) issued Circular A-130, "The Management of Federal Information Resources,"107 (the Circular) which provided federal agencies instructions concerning issues such as dissemination standards. Although nominally developed to satisfy the Paperwork Reduction Act's108 requirement for the improvement of government-

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wide information resources management, the Circular effectively restricted information dissemination.

The Circular states that agencies are to disseminate information products and services that are: "(a) [s]pecifically required by law; or (b) [n]ecessary for the proper performance of agency functions, provided that the latter do not duplicate similar products or services that are or would otherwise be provided by other government or private sector organizations."

OMB instructed government agencies that, when disseminating information to the public, "maximum feasible reliance" was to be placed on the private sector in providing information services. This policy was an unprecedented subordination of government public service to the commercial drives of the private sector.

This policy also had an enormous impact on EPA generally, and on EPCRA specifically. Public access within EPA was not a priority, even among those who now promote such a policy. In fact, public access was seen as a hindrance, and was generally not pursued. EPCRA was implemented in this inhospitable environment.

Even though the atmosphere at EPA did not encourage public access, the agency had no immediate, direct problems with OMB policies. OMB could not disapprove EPA's actions because EPCRA mandated public access to TRI through computer telecommunications. However, an OMB official admitted that absent the Congressional mandate in EPCRA, OMB, under Circular A-130, would never have permitted EPA to undertake the public

109. OMB Circular No. A-130, supra note 107, § 8a(9), at 52,736 (emphasis added).

110. OMB Circular No. A-130, supra note 107, § 8a(11)(b), at 52,736. OMB stated that such dissemination was to be done in accordance with OMB Circular No. A-76. Id.

111. Several case studies describe the difficulty EPA and the public had with EPA's implementation of the TRI provisions. See, e.g., Benton Found., supra note 55; Gary D. Bass, Implementing Federal Information Dissemination Policy, (Oct. 23-24, 1989) (paper presented at Benton Foundation's Consultation on Electronic Public Information and the Public's Right to Know) (on file with author); Rosegrant, supra note 55.

112. See EPCRA § 313(j), 42 U.S.C. § 11023(j) (requiring EPA to establish and maintain national toxic chemical inventory on computer database accessible by computer telecommunications to "any person" on cost reimbursable basis); see also Henry H. Perritt, Jr., Electronic Public Information and the Public's Right to Know, A Project of the Benton Found. and the Bauman Family Found. 32-33 (1990) (available through Benton Found., Washington, D.C.) (discussing opinions by several experts in field regarding TRI restrictions).
EPA's authority to pursue a public access initiative was limited by budget and personnel constraints. The combination of limited resources and personnel unfamiliar with creating an electronic public access project restricted the agency's ability to create a "user friendly" system. Furthermore, OMB policies continued to inhibit EPA's progress. For example, as EPA considered the possibilities of allowing industry to submit information electronically, it found that several businesses had developed software to allow industry to complete EPA forms. However, software developed by the private sector did not meet EPA's needs. EPA was concerned about the reaction OMB would have to the private sector software because OMB policies, as evidenced by Circular A-130, emphasized privatization to avoid government competition with private sector businesses.

The policy advocated by Circular A-130 was inherently against public access; however, OMB policy may be changing. In the spring of 1992, OMB published a proposed revision of Circular A-130. This proposal promotes meaningful public access, and is a fundamental reversal of current policy. The proposal encourages agencies to take an active role in disseminating government information.

According to OMB, "[e]very agency has a responsibility to inform the public within the context of its mission. This responsibility requires that agencies actively distribute information, rather than merely responding when the public requests information." In addition, the previous emphasis on privatization was modified. Instead of maximum feasible reliance on the private sector, OMB now proposes that agencies "[t]ake advantage of all dissemination channels, Federal and nonfederal." OMB acknowledged that the real issue is not private sector involvement in disseminating government information; rather, the real is-

113. See Perritt, supra note 112, at 32-33. There is growing consensus among public interest groups, government and the private sector that existing dissemination policies in OMB Circular A-130 and other statutes need to be overhauled and replaced with policies more accurately reflecting current needs. Id. at 22-28.
115. See id.
116. Id. at 18,302 (analysis of proposed §§ 8a(5)-(7)).
117. Id. at 18,300 (§ 8a(6)(c)).
118. See generally Proposed Revision of OMB Circular A-130, supra note 114, at 18,300-03 (making no mention of direct private involvement in discrimination
issue is that OMB's former position, that government information activities should be transferred to the private sector whenever possible, was flawed.

As of this writing, OMB's proposal to change the policy promoted in Circular A-130 is not final. The clear trend, however, is to encourage agencies to actively disseminate information holdings. This trend is consistent with the statutory language in the legislation proposed to reauthorize the Paperwork Reduction Act.119 Although the Paperwork Reduction Act was not reauthorized, the principle of an affirmative dissemination policy was widely supported by public interest groups, libraries, and the information industry.120

In recognition of the policy shift, EPA convened an inter-agency conference on public access in the spring of 1991. One of the conference managers stated, "What made the conference more than just another blip on the federal conference screen was that, for EPA at least, the business of whether and how the government puts data into the public's hands has become a serious senior management concern, both as matters of policy and of operations."121

The success of the EPA conference led to more meetings. The Department of Agriculture sponsored a second conference in November, 1991. The second conference focused primarily on

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120. The reauthorization failed mainly because of issues pertaining to White House review of regulations and the resulting paperwork. While there was widespread support by public interest groups and the information industry for legislation that mandated agencies to affirmatively disseminate information in all formats, disagreement focused on the legislation's language, particularly one section that some felt continued to emphasize privatization. See S. 1044, 102d Cong., 1st Sess. (1991).

121. J. Timothy Sprehe, Issues in Public Access: The Solomons Conference 1 (Nov. 12, 1992) (available through Sprehe Information Management, Wash., D.C.) [hereinafter Sprehe Statement]. The initial conference was dubbed the "Solomons Conference" because it was held in Solomons, Md.
the advantages and disadvantages of providing direct access to federal computers that would permit the public to query databases and download government information.122 Because there had been no public participation in the first two conferences, the Bauman Foundation, in collaboration with J. Timothy Sprehe, convened a public and private sector dialogue in July 1992 to discuss the policy framework that resulted from the first two conferences.123

These conferences, coupled with EPA's practical and successful experience with TRI, have given the agency the opportunity to become a leader in pursuing a meaningful public access agenda. EPA can adopt a policy that promotes affirmative dissemination of information without additional congressional authority. Categories of information that should be publicly available include: (1) information collected by government;124 (2) information not now currently compiled at EPA headquarters, but routinely reported to local, state, or federal government or other governmental units; (3) analyses and reports developed by EPA; (4) commonly requested Freedom of Information Act (FOIA) requests that have been made publicly available; and (5) a comprehensive directory of EPA information resources.

This article has focused on the need for disseminating information that affects policy; however, EPA must also develop a comprehensive, yet coordinated, database of information about environmental conditions. Data collection efforts were hindered during the Reagan and Bush administrations because of OMB's centralized review powers. OMB inappropriately targeted EPA and other selected agencies in an effort to reduce paperwork.125

An effective right-to-know agenda is premised on comprehensive, quality data collection by a government agency. Without such data, public access is meaningless. Although EPA cannot

122. Sprehe Statement, supra note 121, at 3.
123. Id. at 1. Finally, a third "official" conference, sponsored by the Department of Commerce, was held in September 1992. The public, again, was not invited to this conference. Id. at 21-24.
124. Such information includes surveys, monitoring reports, and research.
125. For example, in the Bush years, EPA accounted for about 4% of the paperwork burden imposed on the public, yet was consistently one of the top two agencies with the highest "problem" rate at OMB (between 15 and 25% each year). By comparison, the Treasury Department accounted for the greatest amount of paperwork burden (45%) and had one of the lowest disapproval rates at OMB (less than 1% each year). OMB Watch, Playing the Numbers: OMB and Paperwork Reduction (1989). And while the Treasury Department had one OMB employee reviewing its vast amounts of paperwork, EPA had four OMB employees overseeing its paperwork. Id.
control OMB's oversight authority, EPA could aggressively pursue a strong campaign to strengthen its method of collecting and disseminating information.

2. **EPA Must Revise Its Trade Secret and Confidential Business Information Policies to Promote Greater Public Understanding of Environmental and Health Risks**

Confidentiality of information allows businesses to protect their research programs and marketing plans, the specific formulation of their products, the details of their manufacturing process, and the economics of their operations. Disclosure of trade secrets could hurt American competitiveness in a world economy. While the importance of protecting confidential business information (CBI) is recognized, EPA's uneven application of its CBI policies has resulted in an inappropriate diminution of the public's right-to-know about health and safety studies and other information. CBI claims have become unreasonable. EPA can take administrative actions to remedy many of the problems; however, some changes may require legislative action.

A recent EPA report covering fiscal year 1977 to fiscal year 1990 showed that under the Toxics Substances Control Act (TSCA) more than:

1. ninety percent of all premanufacture notices for new chemicals;
2. ninety-five percent of all polymer exemption submissions;
3. twenty-five percent of all substantial risk notifications; and
4. twenty percent of all reported health and safety studies

are held as confidential business information (CBI). But a comparison of CBI requirements for similar chemicals under TSCA and TRI shows enormous unevenness in the use of the confidentiality claims. Depending on the assumptions used, TSCA claims were between 10 times and 1500 times the rate of trade secrets claimed under TRI.

128. Id. For the 1988 TRI data, there were only 23 trade secret claims, out of more than 70,000 TRI forms submitted. The small number — plus the even
Under the provisions of TSCA, claiming that information is confidential is a simple procedure, unlike TRI. For most TSCA requirements, the applicant merely needs to label the information as "confidential," "proprietary," or "trade secret." In some cases, the applicant needs only to check off a box on the form. There are no penalties under TSCA for false claims, which also discourages accurately reporting chemical releases. EPA should incorporate the successful provisions of the TRI into other regulations. Key points are as follows:

1. Parties submitting information should substantiate the CBI claim at the time of filing ("up-front" substantiation). No information could be claimed as a trade secret or confidential business information unless the submitter shows that:
   a. The chemical identity is not readily discoverable through reverse engineering;
   b. Disclosure of the information is likely to cause substantial harm to the competitive position of the submitter;
   c. Public disclosure of the information is not required under any other federal, state, or local statute; and
   d. The information has not been disclosed to any other person, except the government and those bound by confidentiality agreements, and reasonable measures have been taken to insure the confidentiality of the information.

2. The document that substantiates the CBI claim should be signed by a high level corporate official. This will improve the accountability for false claims.

3. Significant penalties for false CBI claims should be enforced.

4. EPA should impose a narrow definition of allowable claims, along with "class determinations" of what types of data can never be treated as CBI. One of the most important features of Title III trade secrets and CBI is

smaller number when comparing reporting under TSCA's Preliminary Assessment Information Rule (PAIR) to TRI — creates a wide ratio of rates. Id. at 12.
129. Id. at 6.
130. Id.
131. TSCA § 16, 15 U.S.C. § 2614. The list of prohibited acts by TSCA does not include false claims. Id.
that only chemical identity can be classified as a trade secret. EPA should categorically declare certain types of information "non-CBI" such as:

(a) Company name and address;
(b) The chemical name and CAS number of any chemical that is the subject of a health and safety study or report;
(c) Any information that can clearly be obtained from a public or government source, such as newspaper articles, public corporate reports; and
(d) Any other information that contravenes the ability of the agency to carry out its mission or the statutory intent.

This suggested new EPA policy should only affect new requests to classify information as a trade secret. Of course there would be a problem with the vast number of secrecy claims that have already been filed. To address this problem, EPA could instruct program offices to identify all statutory and regulatory policies affecting trade secrets, develop a list of all trade secrets, and develop a procedure for handling the review of existing trade secrets/CBI claims.

The new policy's goal is to shift the burden of proof from EPA to the submitting party, and to require substantiation of the CBI claim. Once a claim is approved as confidential, the burden of proof for challenges to approved claims must shift to EPA, and the agency would have to demonstrate why the information should no longer be held as a trade secret.


EPA should establish a public access task force chaired by a high level agency official. This task force would develop a comprehensive public access program, implementing methods successfully used by TRI and other EPA offices, such as the Office of Information Resources Management. Grassroots and national environmental and public interest groups, industry, information specialists, media, researchers, librarians, EPA program offices, and personnel at various government levels would participate in this task force. The task force would be asked to recommend: (1)
based on priority, which information resources should be made publicly available; (2) what gaps exist in agency information collections; (3) changes needed in trade secrecy and CBI policies; (4) approaches for making information available through computer telecommunications and other means, including system design, user interface, and public outreach and training; and (5) a method of monitoring the progress of making such information publicly available.

While most government information specialists agree that electronic information dissemination should meet public demands and needs, the public's role in shaping the process has not been resolved. Jerry Berman, former director of the ACLU's Project on Information Technology and Civil Liberties, has alluded to the difficulty environmental groups have had in expressing their needs and demands to EPA about the agency's proposed design and approach for implementation of TRI. 132 However, after consulting technology experts, 133 the environmental groups were able to effectively describe their needs and encourage EPA to design the public access initiative to meet those needs. 134 Berman's point remains valid — potential users of government information need to view themselves as constituencies and press for greater public access. 135

132 Jerry J. Berman, The Right to Know: Public Access to Electronic Public Information, 3 SOFTWARE L.J. 491, 517-12 (1989). The article presents a strong case for improving electronic public access, but warns that government will be reluctant to change unless "constituencies committed to public access rights actively work to formulate and implement such a policy." Id. at 492.

133 Environmental groups have received help from organizations such as the Public Interest Computer Association.

134 A Working Group on Community Right to Know was formed shortly after passage of Title III. As EPA began developing plans for the TRI provisions, the Working Group formed a task force to work on how EPA would implement public access through "computer telecommunications and other means." EPCRA § 313(j), U.S.C. § 11023(j). With a grant from the Bauman Foundation, the Working Group was able to consult with the Public Interest Computer Association (PICA). PICA, now defunct, helped draft a model interagency agreement for EPA's use based on the input from Working Group members. The document provided guidance on specifications of the design that EPA should be requesting from its contractor, the National Library of Medicine, in establishing a computer telecommunications system. The Working Group also prepared a plan for EPA's implementation of the "other means" provision of § 313(j). The Working Group continues to monitor all aspects of Title III's implementation. It is housed at the U.S. Public Interest Research Group in Washington, D.C.

135 Although speaking on a broader topic than access to environmental information, a congressional staffer warned the public that "[y]ou have to be aggressive in guarding your own interest. You should insist on getting involved in the planning. You have to identify your own needs and how these new elec-
While the public must promote citizen involvement in public access programs, EPA's best interests are also served by encouraging public involvement. Public involvement is essential because if the agency's public access policy framework and infrastructure are not developed to meet public needs, the implemented functions will not be used. More importantly, public input gives citizens a sense of involvement and ownership, thus enhancing basic democratic principles. Ultimately, citizen involvement strengthens the mechanisms for public access and provides public support for the agency.

4. **EPA Must Be Committed to Making Environmental Data Available in a Variety of Formats and Through Systems that Permit Widespread Use and Analysis**

Traditional approaches to determining public need will not necessarily work in the electronic information age. For example, conducting a user needs analysis remains important, but it should not be the sole basis for making public access policy choices. As information becomes more available, more people will be encouraged to use it. Thus, the public access infrastructure must be designed to meet both current and anticipated needs. The infrastructure must be flexible enough to meet a variety of user needs, and must be provided in formats that reach the widest possible audience, while trying to reach out to an expanded base of users.

One reason TRI is successful is because it provides important information in both electronic and paper formats. In 1988, EPA selected the National Library of Medicine (NLM) as the host for the online computer telecommunications service. One and a half years after choosing NLM, EPA realized that it must continue to find other online outlets for providing TRI data. EPA provided a small grant to Unison Institute to explore improving online services.

136. For example, users' needs will vary depending on their computer skills and interests.

137. While some environmentalists have contended that the NLM was not the best choice as host, it was EPA's only option because of cost factors. See Expanding Electronic Access, Apr. 19-20, 1989 (case study developed by Bauman Foundation for colloquium) (on file with authors).

138. Unison Institute was to specifically explore improving access to groups without the resources required to use the NLM service, as well as to experiment...
EPA has also explored providing TRI information in different formats. EPA now provides TRI data through floppy diskettes, which are suited to most personal computers. Diskettes are a preferred format because they are very manageable for individuals who have never used online services but are familiar with using software programs such as Lotus 1-2-3 and d-Base III. With a diskette, the user can manipulate some or all of the data on their personal computer. However, the drawback to using diskettes is that an individual diskette only contains partial data for each state, making cross-state comparisons difficult.

EPA also distributes the TRI on CD-ROM (Compact Disk - Read Only Memory). CD-ROMs operate like a music compact disk, and are able to store large quantities of information. There are, however, several disadvantages to the CD-ROM approach. First, many people do not have CD-ROM players for their computer. Second, the search software on the CD-ROM is very limited. Finally, even with CD-ROM's ability to store large amounts of data, analyzing information across years remains difficult because such a search would require several sets of CD-ROMs.

TRI is available from EPA in microfiche to each federal depository library. Common microfiche readers can be used to read computer analogs of TRI information submitted by each industrial facility. Microfiche, however, has two weaknesses. First, one cannot make comparisons or special analyses of different submissions. Second, the information cannot be reproduced in quantity. In terms of electronic approaches, EPA also makes TRI underlying data available through magnetic tape.

EPA has also published an annual national report summarizing TRI data in addition to the electronic formats that the agency has provided to the public. EPA has stated, "The concept behind toxics-release reporting is that information should be col-

with data linkage and integration. The grant to Unison Institute was in support of RTK NET, the Right-to-Know Computer Network. RTK NET was started by OMB Watch as a means for "teching up" community groups so that they could better use the NLM system. As time went by, Unison Institute joined OMB Watch in operating RTK NET and expanded the objectives of the service. Last year, RTK NET logged over 5,000 hours of online time to more than 700 groups around the country. Those groups have access to EPA's TRI, civil litigation cases, and facility index of regulatory compliance, along with health data about chemicals, and demographic data from the U.S. Census Bureau. RTK NET also provides bulletin board, conferencing, and electronic mail features. It is a free service to the public.

139. There are at least two federal depository libraries in every congressional district.

140. See, e.g., 1990 TRI DATA RELEASE, supra note 75.
lected for the public and made available to them in its entirety . . . . The bound report represents our attempt to put the data in a factual context without editorializing."\textsuperscript{141}

It is commendable that EPA has broadly interpreted EP-CRA's mandate to make TRI data "accessible by computer telecommunications and other means."\textsuperscript{142} In doing so, the agency has set a standard for developing innovative formats designed to reach the widest segment of the public. However, merely providing information in a variety of formats may not be enough. EPA has recognized that the size and complexity of TRI data requires some type of computer manipulation to aggregate and disaggregate the information, yet many people do not have the skills or resources to do so.

A false dichotomy has begun to develop for those without resources to pay for NLM services. Some potential users may question whether it would be less costly to request the information through the FOIA than to pay the online charges of the NLM. EPA initially considered providing fee waivers, but chose not to do so. Instead, EPA has experimented with a special access center called TRI U.S. to answer the questions of people without resources or computer telecommunications capabilities. The public may call to ask questions that are researched by trained staff; the results are then mailed to the person that requested the information.

A successful public access initiative needs to invest time and money to reach out to the public to assure that people know that information is available and can be readily obtained by them. The initiative must incorporate policies and procedures for multiple formats, low cost pricing, fee waivers, and "user friendly" interfaces.

5. Public Access Must Be Coordinated Within EPA to Allow All Constituencies to Maximize the Power of Data Linkage and Integration

When Congress passed the Paperwork Reduction Act in 1980,\textsuperscript{143} it included a provision that required the Office of Management and Budget to establish a Federal Information Locator

\textsuperscript{142} EPCRA § 313(j), 42 U.S.C. § 11023(j).
System (FILS).  

FILS was to provide details on federal information holdings to the public and governmental agencies at all levels and to therefore help the public understand what information the government collects, holds, and disseminates. For a variety of reasons, including lack of determination, OMB never fully implemented FILS. However, OMB has recently indicated renewed interest in developing FILS.

EPA has played a leadership role in the development of agency-wide inventories. For example, EPA has published several editions of its Information Resources Directory, listing information resources within the agency. The Information Resources Directory is a first step in developing a meaningful agency-wide locator system. In short, EPA should pursue the development of an agency-wide FILS which can serve as a model for other government agencies.

EPA should incorporate the right-to-know principles articulated in this Article in its development of an agency-wide locator system. EPA should involve the public in the design of the locator, seeking comment on: (1) the types of information the public

144. See 44 U.S.C. § 3505(2)(B), (D). FILS was to be "composed of a directory of information sources, a data element dictionary, and an information referral service." 44 U.S.C. § 3511(a).

145. "[FILS] shall serve as the authoritative register of all information requests, and shall be designed so as to assist agencies and the public in locating Government information derived from information collection requests." 44 U.S.C. § 3511(a). The system was to be the "communication link" between government information gatherers and the public or other governmental agencies. S. Rep. No. 930, 96th Cong., 2d Sess. 51 (1980), reprinted in 1980 U.S.C.C.A.N. 6241, 6291. OMB was to facilitate public access by operating and designing an indexing system. In addition, OMB was to compile for public and government use data regarding the number and nature of information requests received. Id. at 6291-92 (referring to 44 U.S.C. § 3511(b)).

146. For a history of FILS and problems with its implementation, see Gary D. Bass & David Plocher, Finding Government Information: The Federal Information Locator System (FILS), 8 Go'vt Info. Q. 11, 11-52 (1991). This article also provides a vision for what FILS could be today and how the government could move in that direction.

147. OMB interest in developing FILS has increased in the last two years. OMB has provided two grants to Charles McClure of Syracuse University to describe and develop a design for a government-wide information inventory/locator system. McClure's first study reviewed existing policies regarding inventory/locator systems and discussed issues pertaining to how such systems could meet the needs of the government and the public. See Charles McClure et al., Federal Information Inventory/Locator Systems: From Burden to Benefit (July 27, 1990) (School of Information Studies, Syracuse University). The second study provided a list of inventory/locator systems that currently exist within agencies and proposed a model using the Internet for implementing a government-wide inventory/locator system. See id.
and agency personnel seek; the key elements that should be provided; (3) the types of formats that are necessary; the user interface for electronic versions; and (5) how much people would be willing to pay to access such a system. The EPA locator is the basis for developing a comprehensive public access program within EPA.

The locator may serve initially as a electronic library "card catalog" with abstracts and other details concerning the information resources, but should be planned as a vehicle for providing access to the information itself. The locator should broadly define the type of information to be included on the system. For example, the locator should include databases, information regarding regulatory activity, general information holdings, plans for information collections, and other types of public information. This will allow "one-stop shopping" for information regarding environmental conditions by both the public and agency personnel. It is essential that the public be able to review and download subsets of various databases and information holdings through the locator. The locator's technology should permit direct input to EPA decision making processes by those accessing the system, as well as ease communications with EPA personnel. Advanced versions of the locator should enable the public to order print and electronic publications through the appropriate source.

The development of the locator service should be overseen by a public access task force; however, additional input from program offices and the public concerning the design and evaluation of the service is also required. The locator's design should aid access by all users, from novices to experts. Key databases that should be made available as soon as possible include:

148. Examples of information sought include information collection data and dissemination products.
149. Key elements include abstracts, the name of a contact person, and underlying data.
150. Formats needed include paper, online, and CD-ROM.
151. For a discussion of the public's difficulties in using TRI data, see supra notes 8-10 and Section III.B, point 4.
152. This will not be a simple matter for EPA since other governmental agencies, such as the Government Printing Office and the National Technical Information Service, are responsible for sales of publications. However, if an arrangement could be worked out, it would benefit the public, reduce staff devoted to fulfilling requests filed with the agency, and possibly improve sales at GPO.
153. The data bases are not ranked in order of importance.
Creating an electronic foundation for public access is essential, but it is only a first step. EPA needs to proceed to develop methods for greater data integration and linkage. Agency-wide identification numbers for companies, facilities, and chemicals should be used by all program offices to achieve linkages between and among regulatory programs. Such linkages between regulatory programs would benefit EPA by improving permitting and enforcement, benefit industry by identifying duplication in information collection efforts, and benefit the public by increasing opportunities for understanding and action. This type of data linkage could also lead to better coordinated policy making, by either identifying gaps in information collections, or by providing the opportunity to develop comprehensive corporate and facility-based profiles.

These comprehensive profiles would combine and link relevant data about specific facilities and companies. They could also be used to describe the current status of permits, permit renewals, violations, enforcement history, discharge amounts, contacts, and production amounts. In addition, the facility or company status under other program initiatives, such as the "33-50" program,154 would also be available. By merely identifying the facility with a unique number, the possibilities of developing complete profiles can be realized. This identification would aid EPA by: (1) facilitating cross-media permitting and enforcement initia-

154. See supra notes 78-80 and accompanying text.
tives; (2) providing greater insight into the success of various initiatives such as the "33-50" program; and (3) tracking progress on key pollution prevention or other measures.

6. To the Extent Possible, EPA Should Coordinate Its Data Collection and Dissemination Efforts with Other Relevant Federal and State Agencies

As information becomes more publicly available, the need to link the information with data from other agencies increases. For example, linking environmental data with demographic, income, and poverty data held by the U.S. Census Bureau is needed to explore patterns of environmental problems and their convergence in different areas. The data could assist in determining how the residents of those areas are affected, and how environmental initiatives should be refined to address the different problems that have been identified.

Similarly, there is a growing need to link pollution data with the Federal Reserve Board's information regarding bank lending patterns. Such a linkage would permit exploring opportunities to redirect community resources into areas that may yield environmentally sound initiatives while simultaneously vitalizing community economic development. Additionally, linking TRI data with OSHA data could aid that agency's enforcement initiatives, provide the public with more comprehensive corporate profiles, and assist EPA in carrying out its mission.

The list of examples could continue; however, the need for cooperation with other agencies is clear. EPA should work with other federal and state agencies in developing standards to enable cross-linkage of databases held by different agencies. EPA should be ready to experiment with standards, services, and software that can support inter-agency and publicly oriented search and retrieval systems.

EPA should also make a commitment to establish a direct agency presence on the Internet (and subsequent similar networks). Given Vice President Al Gore's interest in building information highways, Internet may receive support from the government to become more accessible and user friendly to the general public. If this occurs, EPA should seek to maximize the databases and services that are available through these networks or other forms of information highways.

Finally, EPA should establish a cross-program initiative to implement an "Electronic Data Interchange" capability that sup-
ports all reporting programs. Such an effort will reduce industry reporting burdens, increase data accuracy, reduce lag times between reporting and data availability, and facilitate end-user access to machine-readable data.

IV. Conclusion

Nearly every major policy initiative, from environmental protection to health care, requires use of information to make informed decisions and improve societal conditions. Unfortunately, our country has never developed an information policy framework or infrastructure to meet this need. Although we live in an electronic information age, our policies are written for a less advanced time. The problem is not failing to anticipate the future; rather, it is failing to keep pace with the present.

Protection of the information infrastructure is a core element of democracy. Without the free flow of information, we tear at the fabric of our Constitution and Declaration of Independence. Public participation as “We the people” depends on the federal government supplying us with information about our society, thus enabling us to judge how to respond to issues. The growth of new technologies and the geometrical increase in our ability to process data has increased our appetite for information. However, our pathways to the information have not changed dramatically over the years.

The TRI experience has given us a rare learning opportunity. It has shown what can be done through electronic means and how to implement a public access information system. It has also shown that public access leads to positive results without exorbitant costs. It also raises possibilities of what can be achieved on a broader scale with political leadership. It is hoped that the Clinton Administration will exhibit that leadership.

This article has presented an agenda for moving forward, harnessing public information to enhance the public good. Public access is not a substitute for regulation or enforcement. Rather, it can be a vehicle for negotiating appropriate rules (whether command-and-control or market incentive), a means for building community responsiveness, and a tool for reinventing government. Further debate is needed, but let us not delay.