ENVIRONMENTAL LAW INSTITUTE

INFORMATION ACCESS MECHANISMS:

Collecting and Disseminating the Information Necessary for Environmental Protection

Date

INFORMATION ACCESS MECHANISMS: COLLECTING AND DISSEMINATING THE INFORMATION NECESSARY FOR ENVIRONMENTAL PROTECTION

A Working Paper prepared under the auspices of the Environmental Law Institute's Environmental Program for Central and Eastern Europe

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Information Access Laws: Collecting and Disseminating the Information Necessary for Environmental Protection is one of a series of Working Papers being prepared under the auspices of the Environmental Law Institute's Environmental Program for Central and Eastern Europe. The paper was written by Kenneth L. Rosenbaum, Visiting Scholar; Margaret B. Bowman, Director of the Environmental Program for Central and Eastern Europe; and Edith Lampson Roberts, Staff Attorney. Manuscripts of the Working Paper were reviewed by Elissa Parker, Director of Research and Training, Environmental Law Institute; Suellen Keiner, Senior Attorney, Environmental Law Institute; and David Sarokin, Acting Director, Special Projects Office, U.S. Environmental Protection Agency.

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INTRODUCTION

Every system of defending rights depends to some extent on information. If someone steals my car and I want redress, I need to know who the thief is. If I want to protect the environment, I must know what are the threats to the environment and who is creating them. In this basic sense, information plays a part in every environmental protection mechanism.

Information is necessary to protect the environment, but information alone is not enough. It can effect environmental protection only if legal, political and/or social channels are available to use or respond to the information. For example, if the public receives information about the government's environmental decisionmaking without having legal rights to participate in or provide input to those decisions, the value of that information is significantly limited. Similarly, requiring a company to make public how much pollution it releases, without more, may have no effect on the company's impact on the environment. If, however, the company is concerned about its reputation with the public, about liability for pollution-related injuries, or about losing its permit to operate if it exceeds government-established limits, then being required to calculate and disclose information about its pollution rates may encourage the company to pollute less. Even if the company is not concerned about potential liability, permit revocation, or its public image, the release of information can still aid the government and the public in ensuring that the company does not illegally pollute if the law provides them with sufficient authority to enforce environmental regulations.

This process of interaction and mutual influence among various groups within a society -- the public, business interests, and government -- characterizes a functioning democratic system. Yet such effective interaction is impossible without the free exchange of full and accurate information that can form the basis of individual and collective changes in behavior. Access to information -- in the context of legal and social structures that are conducive to constructive change -- thus fuels the democratic process, in environmental protection as in other aspects of self-government.

Providing access to information, however, is not a simple process. A variety of entities have information (*e.g.*, government ministries, industry), and a variety of entities need information (*e.g.*, citizens, citizen groups, parliament, other government ministries, industry). One simple access to information law is unlikely to address all of the different scenarios that could arise between these numerous entities. For example, a law governing parliament's access to the environment ministry's data on enforcement is unlikely also to address adequately industry's obligation to disseminate information to the public about its pollution discharges. In addition, many opportunities for parliament to create access to information will arise in the context of developing other substantive laws. For example, most media-specific laws in the U.S. (*e.g.*, air, water, or waste laws) contain specific provisions requiring the development and dissemination of information. To ensure broad and effective access to information, a number of different information access requirements must be instituted.

This paper discusses a range of mechanisms for the creation, control, and disclosure of environmental information. It is written both for government officials -- who may wish to incorporate some of these mechanisms in their regulatory systems -- and for citizens and non-governmental organizations (NGOs) -- who may wish both to use the existing information access laws in their countries and to promote the adoption of new mechanisms.

The first part of the paper contains examples of the use or regulation of information for environmental purposes. It included a broad range of information access measures that is intended to provide ideas for governments drafting information access laws and regulations, as well as for non-governmental groups advocating or employing them. The second part of the paper offers a more detailed analysis of three particular information access mechanisms: inspection and monitoring procedures, right-to-know provisions, and freedom of information laws. Finally, the conclusion of the paper offers some perspectives on the role of information mechanisms in the larger scheme of environmental protection.

PART ONE: AN OVERVIEW OF INFORMATION MECHANISMS

This portion of the paper surveys a variety of information mechanisms that can be incorporated into an environmental regulatory system. It looks first at control of information held by the government: public disclosure of government-held information, creation of new information, government collection of privately-held information, and active dissemination of information. Then, it looks at government-mandated dissemination of privately-held information directly to other private entities.

I. GOVERNMENT INFORMATION

A government often possesses significant information about the environment. Public access to all of these materials can enable the public to become better educated on a topic and better informed about the government's activities. This can enrich public debate on environmental issues, and can ensure that government is "doing its job." Some of the information can also be very useful to regulated industries. For example, government information could help industry to understand better government's regulatory requirements or to identify new environmental technologies. In addition, information held by one government organization may be valuable to another organization within the same government. Enabling all of these uses of government information will maximize the effectiveness of the environmental protection system.

Some of the information valuable for environmental protection is collected by government for other purposes. For example, an environmental ministry may collect valuable data in its role as regulator or administrator. The information might even have been collected for non-environmental purposes, such as geographical data (*e.g.,* aerial photographs, maps, meteorological records). The government could be required to release this information upon specific demand, or to disseminate the information to the audience

that would need it. Government also could develop new information, or require others to do so.

This part of the paper discusses various mechanisms for access to environmental information held or gathered by the government. The discussion focuses on examples from U.S. federal law, though many state and local governments -- as well as other countries -- have analogous provisions. In fact, many federal programs have been adapted from successful state or local innovations.

A. General Access to Government Information

Governments generate many kinds of information important to environmental protection. Examples include data on government-owned natural resources, historical information on practices at government enterprises, health records of government employees exposed to environmental hazards, and mortality rates or other vital statistics about the population at large. Information access laws can enable this information to be used productively by a variety of sources.

1. Citizen Access

In the United States, the public can gain access to federal government records through the Freedom of Information Act (FOIA),[1] a general-purpose law that applies to many kinds of government information. Under this law, any person can request an agency to provide copies of all documents it holds relevant to a particular subject. This system puts the burden on the public to identify the desired information and demand its disclosure, and applies only to information that the government has already undertaken to collect for its own purposes.

When a government agency receives a request for documents based on FOIA, the agency must provide copies of those documents at no or nominal cost or explain why it cannot. Certain documents -- including those dealing with national security, private personnel records, ongoing criminal investigations, or confidential business information[2] -- are exempt from disclosure. If the government refuses to disclose the requested documents, the person requesting the information can challenge this decision in court.

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[1] 5 U.S.C. § 552.

[2] Most information access guarantees in the United States exempt the so-called "trade secrets" of private enterprises from public disclosure. The lack of any clear definition of what constitutes a trade secret has enabled industry and government to invoke this exception frequently to withhold environmental information, and has generated costly and time-consuming litigation over whether such withholding is proper. Countries instituting information access measures for the first time should consider carefully the desirability of incorporating broad protection for trade secrets in their laws.

In addition to, or instead of, general purpose access laws like FOIA, a government may wish to grant access to information collected under a specific statute or for a specific purpose. For example, the European Community has a directive on freedom of access to environmental information which requires member states to make information in their possession that is relevant to environmental issues available to any person upon request.[3] Specific provisions in several U.S. environmental statutes -- such as the Clean Air Act,[4] the Clean Water Act,[5] and the Resource Conservation and Recovery Act (RCRA)[6] -- allow the public to have access to any records, reports, or information the government obtains in the course of enforcing the acts. These provisions are subject to much narrower exemptions than are FOIA disclosures.

General laws providing public access to government information have been used very effectively by environmental groups and journalists. For example, a FOIA request to the Department of Energy for historical environmental data from the Hanford Nuclear Reservation (a weapons facility) led to the release of many pages of previously undisclosed reports, indicating widespread environmental contamination at the site. The resulting media attention triggered a public outcry and shamed the government into instituting a multi-billion dollar cleanup of the facility. However, because general freedom of information laws put the burden of identifying the information to be disclosed on the public, they are of limited value, and thus are best used in combination with other information access laws. Freedom of information provisions are discussed in greater detail in Part Two of this paper.

2. *Legislative Access*

A central role of the democratic legislature in the U.S. is to act as an overseer and check on the executive branch.[7] In a parliamentary system, the elected government has an oversight role over the career civil service employees, and the opposition has an obligation to scrutinize the actions of the government. Effective performance of these jobs requires broad governmental access to the records of other government activities. Moreover, because debate in a democratic legislature is intended to reflect public values and opinion, legislators must be able to inform the public and influence public opinion by releasing information about government activities to the public.

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[3] Council Directive of 7 June 1990 (90/313/EEC), (OFFICIAL JOURNAL OF THE EUROPEAN COMMUNITIES), No. L 158/56, (23 June 1990).

[4] Clean Air Act § 144(c), 42 U.S.C. §7414(c).

[5] Clean Water Act § 308(b), 33 U.S.C. §1318(b).

[6] RCRA § 3007(b), 42 U.S.C. § 6927(b).

[7] There are three branches of the U.S. federal government: the legislative branch (Congress), the executive branch (the President and the administrative agencies, including the Environmental Protection Agency), and the judicial branch (the federal courts). The governmental system is designed to provide a balance of powers between these three branches.

In the U.S. Congress, legislative committees have the power to demand disclosure of documents and testimony from executive agencies, such as the Environmental Protection Agency (EPA). They use this information to monitor the activities of the agencies. This power is not limited by the various exemptions that apply to FOIA requests. However, the legislature uses discretion to prevent public disclosure of sensitive data, especially national security information. Congress sets its own rules on information disclosure by members. In fact, the Constitution prohibits the courts or the executive branch from punishing a legislator for making information public in the course of the legislative process.[8]

By tradition (and to maintain friendly relations with Congress, which votes each year on agency budgets) the U.S. executive agencies will grant individual legislators access to most documents on request. If the agency refuses, however, Congress can issue an order requiring disclosure. In addition to this general right to order disclosure, Congress occasionally has required agencies by statute to supply it with particular data. Examples include Toxic Substances Control Act (TSCA) Section 14(e)[9] and Clean Water Act Section 308(d),[10] both of which require the EPA to give congressional committees access upon request to any data collected under the statutes, without exception.

In addition to making individual requests for information from executive agencies, the U.S. Congress has created a special office of its own, the General Accounting Office (GAO), to provide systematic oversight of executive agency activities. The GAO reviews agency actions, evaluates how well the agencies have carried out the law, and reports to Congress on those subjects. The GAO pursues its investigations at the request of congressional committees or individual legislators, by statutory directive, or on its own initiative. This systematic oversight often brings to light problems or opportunities for improvement in environmental regulatory programs and activities. In addition, the constant threat of oversight provides an incentive to agencies to perform their environmental activities properly and efficiently.

Of special relevance for environmental matters is the public nature of the GAO's reports. Even though the information requested by GAO from the executive agencies may not be public, the final GAO report on any topic usually is a public document. Unless they include protected national security information, GAO reports become publicly available thirty days after they are presented to Congress. These reports not only provide the public with information, they also often save the public much time and expense because they present that information in a concise and organized fashion.

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[8] U.S. Constitution, Art. I, § 6 (the "speech or debate" clause).

[9] 15 U.S.C. § 2613(e).

[10] 33 U.S.C. § 1318(d).

3. *Whistleblower Protection*

Sometimes neither the general public nor the legislature can discover environmental information held by the government or a private company because they do not know what to look for. A government employee, however, sometimes can obtain information on the job and can step forward to expose a government problem that otherwise would go undiscovered. Employees of private companies also may have access to information about violations of the law or threats to the environment that are not publicly known. Encouraging such people to "go public" with the information may serve the public interest.

For example, in the early 1980s government employees at the U.S. EPA alerted the public to the poor state of the federal hazardous waste cleanup program. Their public complaints -- which they made after their internal complaints were ignored -- ultimately led to the removal of the heads of EPA's waste cleanup program as well as the director of the agency.

These employees -- often called "whistleblowers" because they "blow the whistle" on an undiscovered problem -- can pay a terrible price for their actions. Because the information they provide to the public usually is damaging to their agency or company, they can become outcasts within the organization. Their superiors may look for ways to fire them, reassign them to less desirable duties, deny them advancement, or otherwise punish them for publicly exposing the problem. Although the law cannot prevent hard feelings, whistleblower statutes can outlaw retribution and give employees a formal complaint process to follow if they feel they are being harassed as a result of their actions.

U.S. federal law includes both general protection for whistleblowers working for government agencies[11] and special protection for public or private employees engaged in specific activities. For example, the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA or Superfund), the U.S. federal law dealing with reporting and cleanup of hazardous chemical releases, has a special whistleblower protection provision.[12] That provision protects public or private employees who have given information to the government, filed a lawsuit, or testified in an enforcement proceeding under that law. Employees who have been fired or discriminated against because of these acts may seek a public hearing and appropriate remedies from the U.S. Department of Labor. In addition, under the law of some states, an employer may not fire an employee for whistleblowing if the termination would violate a perceived public policy, such as a policy in favor of compliance with environmental health and safety controls.[13]

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[11] 5 U.S.C. § 2302(b)(8) outlaws retribution against whistleblowers who work for the government. 5 U.S.C. § 1204 empowers an independent board, the Merit Systems Protection Board, to hear complaints from aggrieved employees and to grant remedies.

[12] CERCLA § 110, 42 U.S.C. § 9610.

[13] *See, e.g.*, (Palmateer v. International Harvester Co.), 421 N.E.2d 876, 85 Ill.2d 124 (1981).

B. *Access to Government Data Used in Specific Decisions*

The legal provisions discussed above give citizens or the legislature a right to request disclosure of government records that are relevant to environmental protection generally. In addition, governments may wish to adopt a law requiring government agencies to disclose the information they use to make a particular decision. In the U.S., general administrative law prohibits formal decisions by government agencies that are "arbitrary and capricious."[14] Under this provision, the courts have required that agencies be able to justify their actions by producing a written record of facts that support the action. Such a record is often available for public scrutiny as a matter of agency policy. In addition, it is almost always open to FOIA requests and must be presented if the agency decision is challenged in court.[15]

In addition, other U.S. laws require most legislative bodies to conduct their official business in meetings open to the public. This notion of open meetings applies to executive agencies and administrative decisionmaking bodies as well.[16] In some cases, the open government principle goes so far as to prohibit decisionmakers from discussing business informally with one another outside of public meetings.

This duty to develop and disclose information is also a key feature of environmental impact assessment (EIA) laws. For example, the U.S. federal EIA law, the National Environmental Policy Act (NEPA), requires agencies to prepare and release an environmental impact statement detailing the factual basis for decisions that significantly affect the human environment.[17] The public must be involved in the development of this document, and the environmental impact statement itself is publicly available.

C. *Government Collection and Creation of Information*

To perform its regulatory functions properly, government often needs information held by private parties. Laws can require private parties to collect this information and submit it to the government. In addition, the government can sponsor private research to develop data and information that does not presently exist. The information generated under both of these types of provisions then can be made available to the public, either through active dissemination by the government or through public requests under FOIA-type laws.[18]

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[14] 5 U.S.C. § 706.

[15] Access to information through discovery in civil court suits is discussed in more detail in Section II.F. below.

[16] *See, e.g.*, 5 U.S.C. § 552b, which governs when U.S. federal agencies must hold open meetings.

[17] For more information about environmental impact assessment laws, see ENVIRONMENTAL L. INST., ENVIRONMENTAL IMPACT ASSESSMENT: INTEGRATING ENVIRONMENTAL PROTECTION AND DEVELOPMENT PLANNING (ELI Working Paper, June 1991).

[18] *See* Section II below for laws requiring private parties to disclose information directly to the public.

1. *Data on Compliance with Pollution Discharge Limits*

Almost every U.S. pollution control law requires regulated industries to monitor their pollution discharges regularly and to keep records of their monitoring data and other information relating to their polluting activities. These laws require that the records either be provided periodically to the government or be available for inspection by the government on demand. In most cases, the laws provide for public access to any such records in the government's possession, so long as the records do not reveal trade secrets or other business confidences.[19] Even if the law lacks explicit public access language, government-held records -- including those generated by private individuals -- still may be available to the public through FOIA, as discussed above. Usually, the government or the polluter bears the burden of proving that the data should *not* be available to the public.

Examples of U.S. environmental laws with monitoring and recordkeeping requirements include the Clean Air Act,[20] the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA),[21] the Surface Mining Control and Reclamation Act (SMCRA),[22] TSCA,[23] Superfund,[24] and the Clean Water Act.[25]

Self-monitoring and recordkeeping laws are indispensable to government enforcement programs because the government does not have the resources to monitor all regulated industries itself. In addition, these laws can serve an important function in citizen enforcement. Public access to such compliance records allows individuals and NGOs to identify regulated industries that are violating the law. With this information, the individual or NGO could notify the government enforcement officials and encourage them to take enforcement action. The NGO or individual could also publicize the violations, using public pressure to force the industry to correct its violations. If the law has a citizen suit provision, the individual or NGO could also take direct action against violators when such enforcement

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[19] *See* note 5 above regarding trade secrets.

[20] Recordkeeping, reporting, inspection, and public availability provisions in the Clean Air Act include Sections 114, 208, 412, and 603, 42 U.S.C. §§ 7414, 7542, 7651k, & 7671b.

[21] FIFRA Sections 8-10, 7 U.S.C. §§ 136f-136h, deal with recordkeeping, inspections, and disclosure of information.

[22] SMCRA § 517, 30 U.S.C. § 1267.

[23] TSCA Section 8, 15 U.S.C. § 2607, deals with reporting and recordkeeping; TSCA Section 11, 15 U.S.C. § 2610, concerns inspections and grants subpoena powers to EPA.

[24] CERCLA Section 104(b), 42 U.S.C. § 9604(b), gives the government authority to conduct studies of hazardous waste sites that may pose a threat to the public; CERCLA Section 104(e), 42 U.S.C. § 9604(e), deals with entry, inspection, and rights of the public to information found at such sites.

[25] Clean Water Act § 308, 33 U.S.C. § 1318.

is not undertaken by government sources.[26] This self-monitoring and recordkeeping system is discussed in more detail in Part Two of this paper.

2. *Right-to-Know Laws*

In addition to reporting levels of discharges directly regulated by pollution control laws, industries can also be required to provide to the government and the public more general reports on their overall use and discharge of various kinds of potential pollutants. This reporting can include chemicals stored and used at the facility, pollutants discharged in the normal course of business, as well as pollutants discharged through accidents. Because these laws are designed to inform government and the public about any release of pollutants that may affect the environment, they are often described as "right-to-know" laws. Some versions of these laws in the U.S. explicitly provide for public access to the data collected. Even if this is not expressly required, the information usually can be obtained by the public through a FOIA request.

Examples of these types of laws in the U.S. include the Emergency Planning and Community Right-to-Know Act (EPCRA), requiring reports on the use, storage, routine release, and accidental release of toxic chemicals,[27] Superfund Section 103, requiring reports of accidental spills and other releases of hazardous substances,[28] Clean Water Act Section 311(b)(5), requiring reports of accidental releases of oil or hazardous substances into navigable waters,[29] and the Clean Air Act Amendments of 1990, Section 821, requiring reports on routine carbon dioxide emissions that contribute to acid rain.[30] Some of the U.S. right-to-know provisions are discussed in greater detail in Part Two of this paper.

3. *Other Recordkeeping Laws*

The government also may require persons to maintain other records of environmental interest. For example, TSCA Section 8(c) requires manufacturers and other commercial handlers of chemicals to maintain records of "significant adverse reactions to health or the

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[26] For more information on the role of public access to information in citizen enforcement, *see* ENVIRONMENTAL L. INST., THE ROLE OF THE CITIZEN IN ENVIRONMENTAL ENFORCEMENT (ELI Working Paper, August 1992).

[27] This act is also called SARA Title III, because it was enacted as the third title of the Superfund Amendments and Reauthorization Act of 1986. The act is codified at 42 U.S.C. §§ 11001-11050.

[28] 42 U.S.C. § 9603.

[29] 33 U.S.C. § 1321(b)(5).

[30] 42 U.S.C. § 7651k.

environment . . . alleged to have been caused by the substance."[31] Such records are to include adverse reactions of employees (to be kept for thirty years) and of any other person (to be kept for five years). They are retained by the manufacturer or handler, but are available for government (and sometimes public) inspection.

The Occupational Safety and Health Act (OSH Act) also requires certain employers to maintain records of worker exposure to toxic chemicals and to make these records available to the government.[32] Related provisions of the OSH Act that provide for worker access to employer information about toxics in the workplace are discussed in detail in Part Two.

4. Censuses and Related Data Collection

Sometimes data collected for non-environmental purposes can have environmental applications. The national census periodically conducted by the federal government provides a wealth of valuable information on changing population trends as well as on resource generation and use patterns. Tax collection records also can provide information relevant to environmental issues, such as relative income trends and gasoline consumption. In addition, the U.S. Department of Commerce's statistics on U.S. exports include information on recovered materials. These sorts of data usually are available to the public, either through the specific statutes that authorize collection of the data, or generally through FOIA.

Often commercial data can be useful for environmental protection purposes. For example, the Resource Conservation and Recovery Act directs the U.S. Commerce Department to identify existing and potential demand for recovered and recycled materials.[33] Recyclers, including state and local governments running recycling programs, eagerly seek this type of new information about potential buyers.

5. Studies and Research

The U.S. government generates a significant amount of information through studies and research. Some of these studies are conducted directly by government experts. Others are conducted by private parties under direct contract to the government or through a financial grant from the government. Many of these studies are made available to the public upon completion, and most others can be obtained through a FOIA request. These studies serve many ends. They can generate information necessary to solve particular local problems and to develop technology with broad applications. They may shed light on

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[31] 15 U.S.C. § 2607(c).

[32] OSH Act § 8(c)(3), 29 U.S.C. § 657(c)(3).

[33] RCRA § 5003, 42 U.S.C. § 6953.

existing problems or identify new ones. Active research programs also produce trained scientists and technicians -- a work force prepared to take on new environmental challenges.

The Superfund statute (CERCLA) contains many such information-generating research provisions. At the individual site level, CERCLA authorizes the government to undertake whatever studies and investigations are necessary to respond to a particular release of hazardous substances.[34] At the national level, the statute requires EPA to conduct a series of studies on the human health threats of contaminated sites. All information from such studies is available to the public.[35]

Under CERCLA, EPA creates a National Priorities List of sites eligible for federal cleanup. CERCLA directs the Agency for Toxic Substances and Disease Registry (ATSDR) to prepare an assessment of the threat to human health from each site on the list. In addition, on petition of a citizen, the ATSDR may perform health assessments of any site where hazardous substances may pose a health risk. Based on the results of these assessments, EPA may take steps to reduce health risks at the sites, or the ATSDR may undertake more detailed health studies of the exposed population.[36]

CERCLA also directs the ATSDR to prepare toxicological profiles of the most dangerous hazardous substances generally found at sites on the National Priorities List.[37] These profiles help EPA set cleanup priorities and also help the general public evaluate the risks posed at each site. If available information on health effects is inadequate, CERCLA requires the ATSDR to conduct new research.

To help the public further understand the implications of a toxic chemical release and cleanup, CERCLA allows the government to issue technical assistance grants of up to $50,000 per site to groups of citizens affected by a release. These grants enable the citizen groups to conduct an independent study of the site.[38] In addition to this specific research, CERCLA also authorizes a broad program of government-funded research and training in health and science issues related to hazardous substances.[39]

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[34] CERCLA § 104(b), 42 U.S.C. § 9604(b).

[35] CERCLA §104(e)(7), 42 U.S.C. § 9604(e)(7).

[36] Health assessments are covered in CERCLA Section 104(i)(6), 42 U.S.C. § 9604(i)(6).

[37] CERCLA § 104(i)(2) & (3), 42 U.S.C. § 9604(i)(2) & (3).

[38] CERCLA § 117(e), 42 U.S.C. § 9617(e).

[39] CERCLA § 311, 42 U.S.C. § 9660.

6. *Compelling Private Research*

In some situations, regulatory agencies may require private parties to conduct research or collect information at their own expense to demonstrate the safety and effectiveness of a product before the product can be marketed to the public. The United States regulates drugs and pesticides in this way.

For example, under FIFRA, no pesticide may be sold or distributed until it is registered with the EPA.[40] To register a pesticide, an applicant must provide data demonstrating that the product will perform its intended function and will not cause "unreasonable" environmental harm. Usually, the manufacturer or importer of a new pesticide will have to present EPA with the results of extensive research. A manufacturer wishing to register a previously approved pesticide can use previously submitted or publicly published research results.

EPA has broad powers to compel research on other potentially harmful commercial chemicals. Under TSCA, a manufacturer of a new chemical substance must notify the EPA and provide copies of any health or environmental safety data the manufacturer has on the substance.[41] EPA also can order manufacturers to prepare additional health and safety studies on chemicals they manufacture or import. Before it can order such a study, EPA must establish that the chemical may pose an unreasonable risk to the environment.[42] All of these studies are subject to public review under FOIA laws. The information contained in these studies can be very useful to the public in identifying localized risks to health and the environment.

D. *Active Dissemination of Information*

The information provisions described above enable the public to gain access to information held by the government. In some situations, the government may wish to go one step further and actively disseminate information to the public. This section describes some options available to assist the public in obtaining and understanding information about the environment.

1. *Scientific and Technical Libraries*

To make information about the environment more accessible to the public, the government may collect some of that information in a library or clearinghouse. The best

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[40] FIFRA § 3a, 7 U.S.C. § 136a(a).

[41] TSCA § 5, 15 U.S.C. § 2604.

[42] TSCA § 4, 15 U.S.C. § 2603. Of course, EPA has authority to restrict the manufacture or distribution of chemicals if it establishes that the chemicals *do* pose an unreasonable risk.

known example in the U.S. is the Toxics Release Inventory (TRI) collected under EPCRA.[43] EPCRA directs EPA to maintain a TRI computer database accessible to anyone with a computer and a telephone modem.[44] By accessing the database, a citizen can quickly obtain a report on which companies are discharging what chemicals in what quantities to what media in any part of the country. Citizens without telephone access can purchase computer-readable copies of the inventory, and those without computers can ask EPA to search the inventory for particular information. In addition, the TRI database is available on microfiche or compact computer disc (CD-ROM) format at over 4,000 locations around the country -- many of them public libraries -- where people can go to use the database free of charge. A toll-free hotline also exists to answer questions from the public about the TRI system and other aspects of EPCRA.

In addition to the TRI database, the Superfund statute directs the ATSDR to maintain an inventory of information on the health effects of hazardous substances.[45] In connection with this inventory, the ATSDR is required to offer advice to national, state, and local officials, as well as to the public, on health issues related to toxic exposure.

A government also can collect information on pollution control technologies in order to help regulated industries find practical means to meet environmental standards. In the U.S., RCRA Section 8003 directs EPA to collect and disseminate information on solid waste management technologies.[46] The Clean Air Act Amendments of 1990 require the states to collect information on emissions control technologies for small businesses,[47] and the Pollution Prevention Act of 1990 directs EPA to establish a clearinghouse on source reduction technology.[48]

2. *Explaining Legal Obligations*

Sometimes the government scheme of environmental regulation is so complex that industry and citizens require help understanding it. The government may establish information offices to respond to questions from the public about regulations. The EPA has set up several telephone "hotlines" that industry and the public can call without charge to ask questions about regulatory requirements, as well as to request information about government activities. In addition, EPA has a Small Business Ombudsman to answer questions from small businesses and to advocate the point of view of the small business community in agency proceedings. The 1990 Clean Air Act requires states to establish

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[43] This national compilation of toxic chemical pollution was discussed briefly above in conjunction with right-to-know laws, and is described in more detail in Part Two of this paper.

[44] EPCRA §313(j), 42 U.S.C. § 11023(j).

[45] CERCLA §104(i)(1)(B), 42 U.S.C. § 9604(i)(1)(B).

[46] 42 U.S.C. § 6983.

[47] Clean Air Act § 507(a), 42 U.S.C. § 7661f(a).

[48] 42 U.S.C. § 13105.

compliance assistance programs to help small businesses understand their obligations under the law.[49]

3. *Environmental Education*

The government can do much to develop public support for environmental programs by raising general public awareness about environmental problems and their solutions. Government educational efforts can take many forms. The government may require the private sector to institute environmental education programs or it may provide those programs itself. The educational efforts can be part of a broader regulatory program, or can be conducted solely as a general educational initiative. They may involve traditional instruction in the schools, university "extension" programs which offer practical advice to land and home owners on subjects ranging from pest control to energy conservation, or instructional programs in zoos, parks, and museums.[50] Environmental protection goals also may be promoted through advertising campaigns,[51] celebrated on public holidays and commemorative days,[52] or depicted on postage stamps. The possibilities are limited only by the imagination.

4. *Effective Use of the Media*

Though it is not a resource explicitly identified in most environmental laws, the power of the mass media can be harnessed in support of environmental regulatory systems. Environmental enforcers can do much to change public behavior, deter illegal activity, and raise public awareness of problems through strategic use of the press. For example, if the government announces that it believes a particular pesticide can cause cancer and it intends to ban sale and use of the pesticide, industry and the public may stop using the pesticide long before the ban can be approved and implemented. If the government is about to levy a particularly large fine against a polluter, doing so publicly and with some fanfare can help deter future violations. Requiring as part of the settlement, a public apology to be printed in newspapers that are circulated in areas where the violator does business, also may increase public knowledge and deter future violations.

These tactics are more the concern of the implementer than the drafter of environmental laws, but the drafter should consider whether the government needs statutory

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[49] Clean Air Act §507(a)(3), 42 U.S.C. § 7661f(a)(3).

[50] For example, private amusement parks in the U.S. that have marine mammals on display are required to include conservation and educational materials in their entertainment programs. *See* Marine Mammal Protection Act § 104(c)(2), 16 U.S.C. § 1374(c)(2).

[51] Smokey Bear is a cartoon character that appears in government-sponsored advertisements urging people to prevent forest fires; Woodsy Owl is another cartoon character that encourages clean maintenance of public lands. *See* 16 U.S.C. §§ 580p-580p-4; 36 C.F.R. Parts 271-272.

[52] In the United States, many states have established "Arbor Day" as a day commemorating the importance of trees, but not as a day off from work for public employees. *See, e.g.*, Neb. Rev. Stat. § 62-301.01. An Earth Day each spring also has raised the environmental consciousness of many people.

authority for these sorts of actions. In the United States, such powers to use the media are seldom spelled out in the law.

II. INDIVIDUALLY HELD INFORMATION

Environmental information held by individuals is often more valuable to other individuals than to the government. In addition to requiring private parties to submit information to the government, a information access law also can require private parties to submit information directly to other individuals.

A. Right-to-Know Laws

As discussed above in Section I.C.2., a government may wish to require industries to report on their overall use and discharge of potential pollutants. Not only are these laws designed to inform the government about industry activities, but a primary goal often is to inform the public about releases of pollutants that may affect them or their environment. This information sometimes is disseminated to the public through government channels, but often the regulated industry is required to report directly to the affected public. Some U.S. right-to-know laws are discussed in more detail in Part Two below.

B. Product Labeling

Most laws controlling product labeling are aimed at influencing transactions between the seller and the consumer of a product. A government may wish to require warnings for products that create risks to health, such as lead-containing paints or cigarettes.[53] In addition, a government may wish to require warnings on products that create risks to the environment, such as products containing ozone-depleting chlorofluorocarbons (CFCs).[54] Recently, much attention has been given in both the U.S. and Europe to the development of product labeling based on environmental risks of the product.

In addition to warnings based on known risks, a product label also could provide information that will help (and encourage) the consumer to purchase the most environmentally sound product. For example, to promote energy conservation, the U.S. requires certain large household appliances to bear labels explaining how much they are likely to cost to operate and how that compares with similar appliances on the market.[55] Similarly, advertisements for automobiles in the U.S. must include information on fuel efficiency.[56] Requiring labels to list a product's ingredients also can enable consumers to make environmentally informed choices.

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[53] *See, e.g.*, 16 C.F.R. § 1303.3.

[54] *See, e.g.*, 16 C.F.R. § 1401.

[55] *See* 42 U.S.C. §§ 6294-6296; 16 C.F.R. § 305.

[56] *See* 15 U.S.C. § 2006; 16 C.F.R. § 259.

Specially approved "green" labels also can be permitted on products that are beneficial to the environment because they are cleanly made, made with recovered materials, or easy to recycle. Such labels now are being developed in many countries, some through government regulation and others through private initiatives. Conversely, special warnings could be required on products that are judged to have excess and wasteful packaging.

Labeling laws also can require manufacturers to include instructions for environmentally safe use of their products. In the U.S., pesticide laws require the consumer to use the pesticide only in conformance with the provided instructions.[57] A labeling law also could require products to bear markings that make recycling easier. For example, in the U.S., most plastic products bear a code identifying the particular resins from which they are made to facilitate consumer separation for recycling.[58]

Most of the above labeling schemes rely on a caring consumer in order to make an impact on environmental protection. Most green products cost the consumer a little more, even though the total cost to the environment is lower. In the case of energy-efficient products, the consumer may save in the long run, but the initial cost of the product often is higher. These schemes work best in good economic times, among well-off consumers. In economically difficult times, people may not be willing to make a short-term sacrifice for long-term environmental benefits.

C. *Recording of Environmental Hazards in Deeds*

The concept of labeling products also can be applied in the context of real estate transactions. Disclosure of environmental hazards can be required before real estate is sold or leased. Some U.S. states require direct disclosure of known or suspected environmental problems, usually in writing, to the would-be purchaser or tenant.[59] Alternatively, some states require that such problems be recorded in the public records of property ownership, which usually are reviewed by purchasers and lenders before money changes hands in a land sale. Some states go further, requiring that environmental hazards be remedied (or at least that a plan for remediation be approved by the government) before a property can be sold. The leading example of this is the New Jersey Environmental Cleanup Responsibility Act (ECRA).[60]

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[57] FIFRA §12(a)(2)(G), 7 U.S.C. § 136j(a)(2)(G).

[58] This is presently only a voluntary program in the U.S.

[59] The U.S. Congress also has ordered the federal government to disclose any environmental hazards resulting from storage or disposal of hazardous substances before the government sells or transfers land. *See* CERCLA §120(h), 42 U.S.C. § 9620(h). In Central and Eastern Europe, several countries are now requiring environmental audits of properties before they are privatized. *See, e.g.*, Modification-Amendment to the Privatization Act No. 92/1991, Federal Assembly of the Czech and Slovak Federal Republic (Feb. 18, 1992).

[60] 13 N.J.S.A. 1K6 *et seq.*

Disclosure and remedy laws, particularly New Jersey's, have been highly effective in promoting the cleanup of old waste sites. They rely ultimately on purchasers' fears of being held liable for the cleanup of past contamination on the property. They also work best where the real estate market is active -- *i.e.*, where properties change hands fairly often (so all properties come under the law sooner rather than later) -- and where purchasers have a choice between clean and dirty properties. In other circumstances these laws still may be useful, but they might not be as effective as they have been in the United States.

D. Disclosure in Securities Sales

Yet another category of laws governing private transactions with environmental implications concerns disclosure of liabilities in securities transactions. In the United States, corporations seeking to sell stock or securities to the public must file a financial disclosure statement reflecting their assets and liabilities.[61] The duty to include potential environmental cleanup costs as liabilities under this law is presently being debated. Requiring disclosure of such costs may encourage companies to clean up sites in order to remove the liabilities from their balance sheets.

Some state governments also impose environmental protection controls on the transfer of business interests. For example, the state of New Jersey will not allow sale of controlling interests in certain classes of industrial companies (which is usually accomplished through a sale of stock) unless the company is free of environmental liabilities or has a state-approved cleanup plan and the buyer has notice of the liabilities.[62]

E. Auditing and Pollution Prevention

In order to encourage environmentally efficient companies and ensure compliance with environmental regulations, a government may wish to encourage or require polluters to educate themselves about their own emissions and resulting liabilities. One way to encourage this self-evaluation is through environmental audits -- full evaluations of a company's operations which examine its environmental efficiency, pollution prevention, and regulatory compliance. Because an environmental audit might reveal information that would serve as a basis for civil or criminal liability on the part of the polluter, companies (in the U.S. at least) often resist programs that require audit results to be shared with the government or the public.

Various approaches can be adopted to encourage these audits. The most lenient is to have a voluntary program with assurances that the government will not use the results of an audit against a participating company. For example, the auditing agency could agree not to share the results with government enforcement authorities, or the polluter could be guaranteed a temporary amnesty. A more stringent approach would make the audit mandatory, but would keep the results confidential. More stringent still would be a

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[61] *See* 15 U.S.C. §§ 77e-77g & 77aa Schedule A (25).

[62] N.J. ECRA, 13 N.J.S.A. §§ 1K6 *et seq.*

provision providing that, the polluter be required to present the government with a certificate of compliance from the auditor in order to secure or renew a permit or license.[63] Finally, the results of a mandatory audit could be submitted directly to an enforcing agency, which could then negotiate a compliance agreement with or seek direct sanctions against the polluter.

As discussed above, a government also may require polluters to keep track of discharges that are harmful to the environment but not currently proscribed by law. The U.S. EPCRA statute requires such reporting for certain toxic chemicals. A prudent company may wish to minimize these discharges for fear of future regulation or future liability for environmental damage as well as out of concern over public attention to the discharges. Similarly, the Safe Drinking Water Act (SDWA) requires public water systems to monitor the presence of contaminants that presently are unregulated.[64] A government also may wish to require the polluter to draw up plans for reducing potentially harmful discharges or reducing regulated discharges below mandated levels: the Pollution Prevention Act of 1990 requires companies reporting discharges under the federal EPCRA statute to file a source reduction report as well.[65]

F. Discovery

Individuals or industries that cause environmental harm may be liable for damages or cleanup costs in civil lawsuits brought by other private parties or by the government. The civil litigation process thus can serve as a useful mechanism for the exchange and dissemination of information about environmental hazards.

In order to identify all information relevant to a lawsuit and to encourage settlement, court rules may provide several avenues for each party to discover relevant information held by other parties to a case.[66] The U.S. Federal Rules of Civil Procedure allow parties to take pretrial testimony from witnesses under oath; to submit written questions to opposing parties; to require production of documents or things; to require inspection of property; and to request the admission of facts not disputed among the parties. Failure to respond to such "discovery" requests fully and truthfully will expose a party to sanctions from the trial court. Generally, information obtained through this civil discovery process becomes part of the official record of the trial, which can be reviewed by any member of the public.

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[63] This scheme is common in U.S. automobile emission inspection programs.

[64] 42 U.S.C. § 300j-4(2).

[65] 42 U.S.C. § 13106.

[66] In the U.S., to be eligible for discovery through such procedures, information must be relevant to the subject matter of the litigation and must not be subject to a claim of privilege (such as the attorney-client or physician-patient privileges).

PART TWO: A CLOSER LOOK AT THREE INFORMATION TOOLS

I. INDUSTRY SELF-MONITORING OF COMPLIANCE WITH POLLUTION STANDARDS

Successful enforcement of pollution standards requires three ingredients: (1) definite, unambiguous standards; (2) available evidence of whether a source is complying with those standards; and (3) a willing and able enforcer. Meeting the second requirement is fundamentally an information problem.

An enforcing agency can rely on two general mechanisms for obtaining evidence of violations -- the agency can monitor polluters itself, or it can require the polluters to monitor themselves and submit reports to the agency. Although a successful enforcement program can never entirely forego government monitoring, experience in the United States suggests that self-monitoring and disclosure requirements are powerful enforcement tools.

Industry self-monitoring and reporting offer several advantages over government inspections. First, self-monitoring is comprehensive -- every permit holder must submit a monitoring report. Government inspections can rarely be so all-encompassing. Second, it is equitable -- the costs of monitoring fall mainly on the polluters, rather than on the government. Third, if the monitoring reports are publicly available, the system facilitates enforcement through citizen pressure and, if available, direct legal action against violators. And fourth, the reports serve as virtual confessions of violations, making formal enforcement proceedings much simpler.

Self-monitoring has drawbacks, however. Polluters may conduct sloppy monitoring or practice outright deception. One solution is to combine occasional random government inspection with strong penalties for faulty or untruthful monitoring reports. Another solution is government standards for and certification of monitoring equipment, monitoring personnel, and testing laboratories. Such measures do not eliminate the need for direct inspection, but they reduce the risk of widespread error.

A second problem with self-monitoring is how to screen adequately the large amount of data generated. With monthly monitoring reports submitted by hundreds of regulated factories, an enforcing agency may not even have the time or resources to review the reports and identify violations. This difficulty can be reduced by standardizing the reporting forms, by requiring violators to submit a separate notice of violation, by requiring less frequent reporting from smaller, cleaner sources, and/or by focusing enforcement scrutiny on regions where severe environmental problems are apparent. Computers also can simplify screening of reports. In addition, if the monitoring reports are publicly available, citizens or citizen groups can review reports and either refer violations to the government or sue to enforce the regulations directly.

The statute in the U.S. generally considered to be the model for the use of self-monitoring is the Clean Water Act. This act outlaws all discharges of pollutants into surface

waters without a permit from the federal or state government. The permits contain clearly stated discharge limits and other conditions, and either the government or citizen plaintiffs can go to court to enforce the permits.

The Clean Water Act contains two key information tools that aid enforcement. First, holders of water discharge permits must self-monitor and report on their discharges. The government can specify what sorts of monitoring, sampling, and recordkeeping a permit holder must undertake.[67] By EPA regulation, permit holders must file monthly discharge monitoring reports (DMRs) with the government, as well as notices of noncompliance if the monitoring indicates a violation.[68] Noncompliance serious enough to threaten health or the environment must be reported to the government within 24 hours.

To ensure that the monitoring procedures and records are accurate, the government not only has access to a permitholder's records, but also has broad inspection powers. These powers include the right to enter a permitholder's private property without advance notice, to inspect monitoring equipment, and to take samples of effluents.[69] This authority, combined with stiff criminal, civil, and administrative penalties for violation of monitoring and reporting requirements,[70] encourages thorough and accurate recordkeeping.

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[67] Clean Water Act § 308(a), 33 U.S.C. § 1318(a). This statutory provision is reproduced in Appendix B to this paper. Note also Clean Water Act Section 402(a)(2), 33 U.S.C. § 1342(a)(2), which directs that specific information collection and reporting requirements be incorporated into individual permits.

[68] 40 C.F.R. § 122.41(*l*). The DMR regulations are included in Appendix B to this paper; an example of a Discharge Monitoring Report appears in Appendix C.

[69] Clean Water Act § 308(a), 33 U.S.C. § 1318(a).

[70] Clean Water Act § 309, 33 U.S.C. § 1319. Under Section 309(c)(4), knowingly filing false statements or tampering with monitoring equipment is a crime punishable by a $10,000 fine and two years in jail for the first offense and $20,000 and four years in jail for subsequent offenses.

For violations of requirements of the Act generally, including Section 308 inspection, monitoring, and entry requirements or any monitoring requirements written into a permit, Sections 309(a) and (b) empower the EPA Administrator to issue notices of violation, issue compliance orders, or bring civil suits against violators. Section 309(d) allows courts to assess civil penalties for violations, up to $25,000 per day per violation.

Section 309(g) allows the government to assess an administrative penalty against violators without going to court. The violator may request a hearing on the penalty and may seek court review of the penalty assessment decision. The public also is entitled to have notice of and comment on such penalties. The penalties range up to $10,000 per day of violation, to a maximum of $125,000.

Section 309(c) allows courts to impose criminal penalties for general violations of the Act or a permit issued under the Act. The penalties range from a $2,500 to $25,000 fine or three years in jail for negligent violations to up to a $1,000,000 fine for knowing violations that have been committed by organizations and that threaten people with death or serious bodily harm.

The second information tool in the Clean Water Act guarantees public access to any permit issued[71] and to any records, reports, or information the government obtains from a permit holder, except for trade secrets.[72] Coupled with the Act's citizen suit provisions, these information access provisions allow citizens to seek relatively quick relief against violators. A citizen need only obtain copies of the polluter's permit and DMRs to see if a violation has occurred. If it has, the DMRs can be used as evidence against the polluter in court.[73]

Environmental groups in the U.S. demonstrated the power and effectiveness of these provisions in the early 1980s. Concerned about a decrease in enforcement efforts, environmental groups initiated a citizen enforcement campaign.[74] In 1982, citizens actually filed more Clean Water Act enforcement suits than did the federal government.[75] This surge in citizen enforcement actions caused EPA to reexamine and improve its own enforcement program.

II. PUBLIC ACCESS TO GOVERNMENT INFORMATION: FREEDOM OF INFORMATION LAWS

A public right to obtain information held by the government, such as that provided by the U.S. Freedom of Information Act (FOIA), offers a basic -- if limited -- system for providing access to environmental information. Most freedom of information laws create a presumption that the government must disclose information to citizens upon their request, subject to certain exceptions. Such a system applies to all information held by the government. It is not specifically linked to environmental concerns. A freedom of information law is a fundamental tool for any regulatory system. It does, however, have significant limitations, and should not be viewed as sufficient -- standing alone -- to provide full and effective access to environmental information.

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[71] Clean Water Act §402(i), 33 U.S.C. § 1342(i).

[72] Clean Water Act § 308(b), 33 U.S.C. § 1318(b). *See also* note 5 above discussing trade secrets.

[73] For a citizen to bring an enforcement action in court, he or she must also demonstrate that the government is not actively enforcing the violation. For more information about these citizen suit provisions, *see* ENVIRONMENTAL L. INST., THE ROLE OF THE CITIZEN IN ENVIRONMENTAL ENFORCEMENT (ELI Working Paper, August 1992).

[74] *See generally* JEFFREY G. MILLER & ENVIRONMENTAL L. INST., CITIZEN SUITS: PRIVATE ENFORCEMENT OF FEDERAL POLLUTION CONTROL LAWS, 10-17 (1987); ENVIRONMENTAL L. INST., CITIZEN SUITS: AN ANALYSIS OF CITIZEN ENFORCEMENT ACTIONS UNDER EPA-ADMINISTERED STATUTES (1984).

[75] *See* MILLER, *supra* note 81, at 12. An Environmental Law Institute study of citizen enforcement found that citizens sue more frequently under the Clean Water Act than under other environmental laws, and that the central reason is the ready availability of compliance information through the Act's self-monitoring requirements. Also important is the permit system under the Act, which requires each permit to state exactly what the sources obligations are, and allows a citizen to compare reported discharges against permit levels with relative ease. Because of this, and other useful features of permits as enforcement tools, Congress in 1990 added an individual permit requirement to the Clean Air Act.

A. *How Freedom of Information Laws Work: The U.S. FOIA*

Experience under the U.S. FOIA shows both the benefits and shortcomings of freedom of information laws. FOIA was enacted in 1966. It has been amended by the U.S. Congress several times since, and has been the subject of extensive litigation and commentary. All U.S. states and many localities have enacted similar freedom of information laws.[76]

FOIA works by establishing a presumption that any person may have access to any record held by a government agency unless the record is covered by a specific exception to the Act.[77] The Act does not define "record," and there has been substantial litigation over whether particular pieces of information requested from an agency are "records" under the Act. In general, agency "records" do not have to be written documents. They can include items such as photographs, tape recordings, and computer disks, but not personal notes of agency employees.

To gain access to an agency record, a person must make a request which "reasonably describes" the record desired.[78] Most agencies require FOIA requests to be made in writing. A FOIA request must ask for existing records. If an agency does not possess the record asked for in the letter, it may simply deny the FOIA request -- it does not have to collect or develop new information. FOIA requires agencies to respond to an information

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[76] Several EC countries have laws or constitutional provisions similar to the FOIA. Denmark's Public Access to Documents Act of 1970 grants individuals the right to see documents in the files of administrative agencies. Like the FOIA, Denmark's law lists several categories of documents exempt from disclosure, such as criminal investigation records, internal personnel materials, and confidential business information. *See* DOCTER INSTITUTE FOR ENVIRONMENTAL STUDIES, EUROPEAN ENVIRONMENTAL YEARBOOK 191 (1987).

In Germany, the right to information is established by Article 5 of the Constitution which provides that "everyone has the right to be informed from sources of information which are accessible to all without obstacles of any kind." *Id.* at 196.

In other EC countries, the right to information is more circumscribed. In the United Kingdom, for example, there is no generic right to government information, and the Official Secrets Act of 1911 makes it a crime for any agency employee to disclose information obtained in the course of his employment unless specifically authorized. Several government employees have been punished under this law, and its presence deters government disclosure of information. *See* Austin, *Environmental Pollution Information -- Disclosure and Access*, 4 CONN. J. OF INT'L L. 413 (1989).

However, the trend in the United Kingdom, as in other EC countries, is towards greater access and increased data collection. For example, the UK recently adopted a fairly expansive system of "public registers" designed to provide environmental information on facilities to the public, and is considering establishing a national database. Highlights of this proposed system, and of similar systems established in the Netherlands and under consideration by the EC itself, are summarized in Appendix D.

[77] *See* 5 U.S.C. § 552(a)(3). The FOIA also requires agencies to make adjudicatory opinions, policy statements, and administrative staff manuals available for public inspection and copying. *Id.* § 552(a)(1)-(2). The text of the FOIA is included in Appendix E to this paper.

[78] 5 U.S.C. § 552(a)(3)(A). A sample FOIA request is included in Appendix F.

request within ten days.[79] When an agency denies all or part of a FOIA request, it must specify the reasons for the denial in writing.

FOIA allows agencies to charge a fee for processing FOIA requests. Fees can be imposed to recover copying expenses, the costs of searching for documents, and, in some instances, the cost of reviewing the request to determine whether any exemptions apply. The fee is not designed to recover the cost of developing the information. Different fees apply according to who is requesting the information. For example, a member of the news media or an educational institution may be charged only for reasonable copying charges, but a person requesting information for a commercial use also may be charged for the review of the request and the search for applicable records. A fee can be waived altogether "if disclosure of the information is in the public interest because it is likely to contribute significantly to public understanding of the operations or activities of the government and is not primarily in the commercial interest of the requester."[80] Small requests also can be processed without a fee.

Agencies *must* disclose the information requested unless it falls within one of FOIA's nine statutory exceptions: (1) documents classified in the interests of national defense or foreign policy; (2) internal personnel rules and practices; (3) information exempted under other laws; (4) trade secrets and confidential business information; (5) internal government memoranda and letters; (6) personnel, medical, and similar files the disclosure of which would invade personal privacy; (7) law enforcement investigations and records; (8) information relating to the regulation of financial institutions; and (9) information about wells (a rarely used exception aimed at protecting certain geological information).[81] If the agency decides that a document contains information that falls within one of these exceptions, it can withhold from disclosure only those parts of the document that are subject to the exception. The rest of the document must be given to the requester.

Judicial review has been essential in enforcing the requirements of FOIA. People whose FOIA requests have been denied have the right to challenge the denial in court. In such a lawsuit, the agency has the burden of showing either that an exception to disclosure applies to the request or that the record does not exist. This gives an advantage to the requester, and promotes the presumption in favor of disclosure. Because many of the statutory exceptions to disclosure are written in broadly-worded, general terms, some agencies have tried to expand the coverage of the exceptions. Having to prove in court that they are entitled to assert an exception helps prevent agencies from wrongly withholding information. Judicial review also has helped clarify the scope of the exceptions and made their application more uniform from agency to agency.

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[79] The statute authorizes the agency to seek a ten-day extension if a response within the stipulated period is not possible. *See* 5 U.S.C. § 552(a)(6)(B).

[80] 5 U.S.C. § 552(a)(4)(A)(iii). A sample request for waiver of fees is included in Appendix F.

[81] 5 U.S.C. § 552(b).

B. *Uses and Limitations of FOIA as a Tool for Obtaining Environmental Information*

A freedom of information law can be very useful in enabling citizens to obtain environmental information from the government. Citizens can use such a law to obtain specific information about environmental conditions and hazards known to the government. For example, citizens could request a list of all hazardous waste sites identified in their part of the country, or a report on levels of air pollutants. A freedom of information statute also can be used to obtain information about government environmental protection activities, such as permitting and enforcement decisions.

In addition, a freedom of information law can serve as a supplement to discovery in environmental law suits. Rules of discovery in civil lawsuits normally limit the time during which information can be sought and the type of information that can be acquired. Litigants can use a freedom of information law to obtain information that would be unattainable in a lawsuit. For example, a litigant who believes a citizen suit might be appropriate, but who lacks the information needed to commence the suit, can obtain information through a freedom of information statute to determine whether to file the lawsuit and what to allege in the complaint. After starting the suit, the litigant also could use the freedom of information law to obtain material that might be considered irrelevant or privileged under the rules of civil discovery.

A law similar to the U.S. FOIA also can enable citizen groups to oversee the affairs of environmental protection agencies. With government records open to public scrutiny, agency employees may feel greater responsibility for their jobs, and they may be less likely to allow inappropriate political or financial motives to influence their decisions. Public access to information can also foster a spirit of openness in environmental agencies.[82] Once they are accustomed to operating in the open, agency officials may be more willing to publish environmental information voluntarily.

However, standing alone, a freedom of information law is a limited tool for acquiring environmental information. Because it provides access only to existing information, a freedom of information law does little to ensure that the government gathers appropriate information in the first place. For example, a freedom of information law will be of little value to a person who wants information about hazardous waste sites if the government has not yet identified the sites. Thus, the usefulness of freedom of information laws depends on the existence of other laws and circumstances prompting the government to gather information.

Even if the government does possess relevant information, a freedom of information law can be an awkward and expensive means for disseminating the information. Freedom of information laws rely on case-by-case responses to specific requests rather than an

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[82] It may also, however, discourage officials from committing potentially embarrassing information to paper, and thereby produce more decisions based on oral analyses and communications.

automatic system for disclosing information to the public. Often, the public is not aware of information that the government possesses, and thus is not able to submit a request for disclosure. Even if the public is aware that the information exists, it can be time-consuming for citizens or public interest groups to determine precisely what information they need, write a request that will identify this information specifically enough so that an agency employee can provide the information in a reasonable amount of time, and follow up on the request within the agency or, if necessary, in court.[83]

It is also difficult to draft a freedom of information statute that anticipates all the various situations in which an exception to disclosure would or would not apply. As suggested by the U.S. experience with FOIA, a great deal of court litigation may be necessary to interpret the exceptions to disclosure and apply them to specific situations. An information disclosure system that depends so heavily on the involvement of courts for its success will be an expensive one to implement.

In short, the U.S. FOIA is an extremely powerful tool because it creates a presumption that all government documents are open for review and forces government to justify itself when it wishes to keep information secret. However, because of the logistical limitations of the FOIA process, it is difficult in practice to obtain concise and relevant information by means of FOIA requests. Thus, a generic freedom of information law should not be relied upon by itself as a means for effectively disseminating environmental management. Instead, such a law can offer an important background presumption of government openness in which other systems of monitoring and disclosure can flourish, and it can serve as a useful supplement to those other systems.

III. RIGHT-TO-KNOW LAWS

The public's right to know about hazardous chemicals sounds like a very simple idea. However, to implement this concept in the U.S., a whole family of laws has been developed. These laws have several different aims, including: (1) keeping workers informed about the chemicals they encounter in the workplace; (2) allowing the general public to know about the chemicals released by neighboring industries; (3) encouraging local communities to plan for emergency releases; (4) informing emergency responders (such as police or firefighters) about what hazards they may encounter; (5) requiring rapid reporting of acutely dangerous releases in order to facilitate emergency response; and (6) encouraging businesses to reduce the amounts of hazardous chemicals they use and emit into the environment.[84]

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[83] FOIA requests must be specific. General requests are usually rejected because the government employee processing the request is not able to identify the government documents that would meet the request.

[84] Appendix G contains a checklist of questions that a law drafter may wish to ask in developing a right-to-know law.

What follows are descriptions of several different provisions under U.S. federal law that are designed to serve one or more of these aims. Some apply to the release of chemicals, and some to their use. Some apply to broad classes of chemicals, and some to discrete lists of a few hundred chemicals. Some require reporting of information to government bodies, which then may forward it to the public, and some provide for direct transfer of information to exposed individuals, emergency responders, or health care providers. The broad range of these provisions illustrates the wide variety of options available to the creative lawmaker.

A. Government Right-to-Know: Clean Water Act § 311

One of the oldest reporting provisions in modern U.S. environmental law appears in Section 311 of the Clean Water Act, which requires *immediate* notice of accidental discharges of oil or hazardous substances into surface waters.[85] This law was designed to ensure that the government knows of and has an opportunity to respond to emergencies caused by accidental spills of polluting substances. The list of hazardous substances subject to reporting and the threshold quantity that triggers the obligation to report are left to be established by regulation. The law requires the federal government to forward all information about such spills to officials of affected states. The goal of informing the public about environmental dangers was secondary in this law, but it often is an important incidental result of reports made under this provision.

Clean Water Act Section 311 was one of the models for the 1980 CERCLA requirement for reporting any unregulated release of hazardous substances into any medium.[86] The CERCLA requirement covers a broader list of hazardous substances, including any toxic or hazardous substance regulated under the Clean Air Act, the Clean Water Act, RCRA, or TSCA. It gives EPA authority to expand this list and to set reportable quantities.

B. Worker Right-to-Know: OSHA's Hazard Communication Rule

In the U.S., the original federal right-to-know laws were designed to benefit people exposed to hazardous substances at work. In 1983, the U.S. Occupational Safety and Health Administration (OSHA) published a hazard communication rule aimed at informing workers about hazards from chemical exposure in the workplace.[87] The rule requires employers to determine what hazardous chemicals are present in the workplace and to supply workers with basic health and safety information about the chemicals they handle. The OSH Act also requires employers to notify employees promptly if they have been exposed to toxic

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[85] Clean Water Act § 311(b)(5), 33 U.S.C. § 1321(b)(5).

[86] CERCLA § 103, 42 U.S.C. § 9603.

[87] 29 C.F.R. § 1910.1200.

substances,[88] and to keep records of worker exposure to toxics. The responsible officials of the reporting company must certify that these records are complete and accurate. Workers are not only guaranteed access to these records, they also have the right to observe how the employer monitors for toxics exposure.[89]

In addition, manufacturers or importers of chemicals that pose a hazard to workers must label their products and provide material safety data sheets (MSDSs) explaining the hazards posed, precautions advised, and emergency responses available. These labels and MSDSs must accompany the chemical when it is distributed or sold. Employers must give employees access to these MSDSs and train them in safe use of the chemicals. In addition, health care providers may request access to information about the chemicals to which their patients have been exposed.

This law covers any chemicals that may pose a hazard, as defined by a long list of criteria included in the rule. Any chemical for which OSHA has set specific workplace exposure limits is automatically considered hazardous, as is any chemical for which the American Conference of Government Industrial Hygienists, a professional organization, has set threshold exposure limits. In addition, any chemical considered a carcinogen, corrosive, irritant, sensitizer (trigger of allergic responses), toxic or highly toxic, or any chemical known to harm specific organs (including reproductive organs) is covered. Chemicals whose labeling and use are regulated under other laws, such as food, drug, or pesticide laws, and hazardous wastes regulated under RCRA are excluded. In total, over 50,000 chemicals are included under the act.

The OSH Act information provisions give workers some direct human health protection, specifically in the training requirements. However, much of the benefit is indirect -- the act primarily requires that the employee be *informed* about his or her exposure risks. The threat of informed workers bringing tort lawsuits for damage from chemical exposure (and the potential for U.S. courts and juries to award large sums to injured plaintiffs) probably has spurred employers to minimize chemical exposure in the workplace even below regulatory standards set for worker exposure. It is also likely that educating labor unions about exposure hazards has led them to bring pressure on managers to reduce exposure.

C. Community Right-to-Know: EPCRA

The OSHA hazard communication rule is the foundation for some of the provisions in the Emergency Planning and Community Right-to-Know Act (EPCRA), enacted in 1986

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[88] OSH Act § 8(c)(3), 29 U.S.C. § 657(c)(3).

[89] *See* 29 C.F.R. § 1904.5(c).

as Title III of the Superfund Amendments and Reauthorization Act (SARA).[90] This is the law that most people in the United States think of when they hear "right-to-know."

While the OSHA rule was aimed primarily at informing workers, EPCRA is aimed at informing local governments, emergency responders, and the general public. EPCRA calls for the creation of state and local emergency preparedness bodies to plan for and receive notice of accidental releases of hazardous substances.[91] Though Congress designated an initial list of substances covered by this provision, EPA can add substances to or subtract them from the list, and can set the threshold amounts for all listed substances.

Any facility that possesses covered substances in excess of the threshold amounts must notify the local emergency planning body of their existence and give immediate notice of any accidental releases. In addition, any facility that keeps MSDSs under the OSHA rule also must prepare reports of the amounts and locations of certain chemicals present at the facility. These reports must be provided to the local emergency planning bodies and to the local fire department. On request of the state or local emergency planning bodies, facilities may be required to submit more detailed information on the storage and use of each individual chemical present.[92]

The public can obtain copies of all this information from the local emergency planning committee, which must publish annual notices of its availability. State and local governments also can impose information disclosure requirements beyond those in federal law. However, EPCRA establishes protection to prevent disclosure of trade secrets -- information kept confidential by a business that would be of commercial use to its competitors.[93] One exception to this trade secret protection guarantees health care professionals access to chemical information if needed for treatment or prevention of injuries. In non-emergency cases, however, the health care professional must agree to protect trade secrets before gaining access to the information.

EPCRA also establishes a system for public disclosure of accidental and routine releases of hazardous substances to the environment.[94] This provision, however, only

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[90] 42 U.S.C. §§11001-11050.

[91] EPCRA §§301-304, 42 U.S.C. § 11001-11004.

[92] The emergency planning bodies must seek this more detailed information if a government official requests it, or if the public requests information concerning a facility keeping more than 10,000 pounds (4,500 kg) of a chemical on-site. If citizens request information on chemical amounts of less than 10,000 pounds, they must state the general need for such information. The local planning body then decides whether the information should be requested from the facility.

[93] EPCRA § 322, 42 U.S.C. § 11042. *See also* note 5 above regarding trade secrets.

[94] EPCRA § 313, 42 U.S.C. § 11023.

applies to businesses that have at least ten employees and are in one of nineteen classes of manufacturing.[95] It also only applies to a list of about 320 chemicals,[96] far fewer than the over 50,000 chemicals requiring MSDSs. In addition, the reporting requirements apply only to chemicals used in quantities of at least 10,000 pounds (4500 kg) or manufactured or processed in quantities of at least 25,000 pounds (11,250 kg).

Companies required to disclose under this provision must submit to EPA an annual report indicating which covered chemicals they use, how much they use, how their waste streams are treated, and how much of the chemical is released into the environment, by medium (*e.g.*, air, water, soil). As discussed above in part 1.D., EPA is required to keep the data from these reports in a computer database accessible to the public. Each year, the EPA releases a summary of this Toxics Release Inventory (TRI) information reported by the covered companies, including detailed analyses and breakdowns of the TRI data. This report is also publicly available.[97]

Making this data readily available to the public may have several effects. Information on toxic pollution can help a community identify unknown health risks. It may pressure large polluters to improve their environmental records in order to maintain their goodwill in the community.[98] Disclosure of environmental information may help potential plaintiffs in civil tort actions become aware of their exposure and identify possible defendants. And it may generate public pressure on the legislature for regulation of unregulated toxic pollutants. The prospect of any or all of these actions may encourage polluters to reduce "voluntarily" their pollution outputs or seek non-hazardous replacements for the hazardous substances they use.

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[95] The law applies to industries in "Standard Industrial Classification" (SIC) Codes 20-39, which are: (20) food and kindred products; (21) tobacco manufacturers; (22) textile mill products; (23) apparel and other textile products; (24) lumber and wood products; (25) furniture and fixtures; (26) paper and allied products; (27) printing and publishing; (28) chemical and allied products; (29) petroleum and coal products; (30) rubber and plastic products; (31) leather and leather products; (32) stone, clay, and glass products; (33) primary metal industries; (34) fabricated metal products; (35) machinery (except electrical); (36) electrical equipment and supplies; (37) transportation equipment; (38) instruments and related products; and (39) miscellaneous manufacturing products. The EPA has the authority to add or delete industry classes on the list, or to add specific facilities to it. EPCRA § 313(b)(1)(B) & (2), 42 U.S.C. § 11023(b)(1)(B) & (2).

[96] 40 C.F.R. § 372.65. State governors or the public can petition EPA to alter the list. Since this list was adopted in 1986, industry has successfully petitioned to have approximately 10 chemicals *removed* from the list. Only one or two chemicals have been added to the list.

[97] The statutory provisions establishing the TRI system are reproduced in Appendix H.

[98] The required collection of data may also provide industry with new information about its own chemical use, which may enable some industries to identify more efficient uses (and thus reduced amounts) of the chemicals.

The public disclosure provisions of EPCRA, however, have drawn criticism from several quarters. Regulated industries have complained about the paperwork burden imposed by these provisions, particularly on small firms. In addition, industries have expressed concern that bad publicity will be generated when they release information about the chemicals they are using. Industries also are fearful that right-to-know laws could encourage an increase of health-related lawsuits against them. Finally, industry representatives have complained about the trade secret provisions in EPCRA, which merely prevent the government from passing out confidential information that the law forces businesses to report; the businesses would prefer to maintain greater control over the information. Some of these industry fears have proven to be overstated. There have been few if any instances of health-related lawsuits spawned by TRI data. Moreover, the administrative and financial burdens imposed by the reporting requirements may well be outweighed by cost savings realized by companies forced to focus for the first time on the need to make their operations more efficient by preventing unnecessary pollution.

Environmental interests have complained that the present EPCRA law does not go far enough, because at present only about five percent of toxic releases are reported. They advocate expanding the list of chemicals and industries covered. Specifically, environmental groups have called for reporting on all chemicals regulated as hazardous under other environmental laws. They also note that the industry-specific coverage exempts some potentially large polluters, such as waste incinerators and government facilities. Releases during transport of hazardous materials also are outside the present scope of EPCRA, although such transportation is regulated by other acts.

Despite these criticisms from both sides, the TRI program has brought many benefits. One goal of EPCRA's public reporting provisions is to encourage reduction of the use and release of toxics. There are many individual, anecdotal stories suggesting that this effort has been successful. The TRI has given the press and environmental groups an important tool. Each year, the issuance of the EPA's report on and summary of TRI data is greeted by a wave of publicity about both the most egregious offenders and the most environmentally benign operations. The resulting public pressure for the most severe polluters to emulate their lesser-polluting competitors has been significant. Some companies have made voluntary public promises to reduce toxic emissions.[99] Some others have agreed to open their plants for regular safety inspections by the communities in which they are located, and have entered into voluntary "good neighbor" agreements in which they agree to modify their operations to reduce citizen concerns about pollution, noise, or other environmental effects.[100]

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[99] In fact, many companies' emission levels did drop during the first years of reporting. However, at least a portion of that reduction may be attributable to more conservative or more accurate estimates of emissions.

[100] Appendix J contains copies of newspaper articles describing public, industry, and government reactions to the TRI system.

The TRI program also has expanded the scope of environmental awareness for both industry and the public. Many companies used to be worried only about directly regulated emissions; if they were in compliance with applicable permit conditions, they could be confident that their pollution emissions would be safe from criticism. EPCRA has forced them -- and their neighbors -- to be aware of a broader spectrum of pollutants, and has encouraged industries to look beyond permit compliance to find more and better ways to mitigate the effects of their operations on the environment.

Perhaps most fundamentally, the TRI program represents a significant shift in the relationship between the government and the public. EPCRA requires the government not simply to act as a passive manager and conduit for TRI data, but to promote and encourage public use of that information. One EPA official who has been actively involved in the development of the TRI program comments that "the Toxics Release Inventory has strengthened and expanded the practice of participatory democracy. Strengthened it by making important environmental information actively and easily available to the public at large. Expanded it by providing a direct channel of accountability, linking a public greatly concerned about toxic wastes to a government charged with regulating such wastes, and to the industrial community which is a major source of toxic releases."[101]

However, right-to-know acts also present several challenges worth noting. First, because they impose an affirmative obligation on a large and constantly changing group to come forward with information, the law can be difficult to enforce. How does the government or citizen enforcer identify the small company that mis-reports or should be reporting but is not? How do they find the company that under-reports its discharges? In its National TRI Report for 1988, EPA estimated that as many as one-third of the facilities subject to reporting requirements failed to report.

Second, right-to-know statutes, particularly if their coverage is comprehensive, may produce a great deal of information. To be useful to either the government or the public, this information must be organized.[102] For example, the U.S. data have been put on a computer database that allows people to extract useful subsets of information, such as emissions by chemical, by geographic area, or by source. Without the capacity to collate material in this manner, an inventory of toxics or other pollutants may be too unwieldy even to assist the government in defining its environmental control objectives, let alone to enable the public to understand the impact of the data and use it to participate in a meaningful fashion in the environmental protection process.

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[101] Sarokin & Schulkin, *Environmentalism and the Right-to-Know: Expanding the Practice of Democracy*, 4 ECOL. ECONOMICS 175, 197 (1991).

[102] The U.S. TRI system produces so much data, it takes the federal government an average of 10 months to compile and release the information. Some states, however, are able to compile data from within their own territory in two months.

CONCLUSION:
THE ROLE OF INFORMATION ACCESS MECHANISMS IN ENVIRONMENTAL REGULATION

Information access mechanisms are both essential to regulation and meaningless by themselves. Their function has to be understood in the context of the greater regulatory system in order to ensure that they accomplish their intended goals. A law drafter wishing to adopt an information provision that has worked well in another jurisdiction must consider the collateral reasons why the provision has worked. What factors led to its success and what steps may be needed to ensure a successful adoption in a new culture and body of law? The drafter must design information provisions to fit -- or to change -- the social and legal context in which the laws will operate.

For example, observers have credited the community right-to-know laws in the United States with encouraging a large "voluntary" reduction in toxic chemical emissions. One partial reason for this may be the threat of private lawsuits claiming injuries from exposure to toxic chemicals. Companies fear that right-to-know laws will not only alert potential plaintiffs to hazardous chemical releases, but will provide them with the evidence to prove these releases in court. Even if few plaintiffs have actually filed lawsuits based on TRI data, the risk of a future lawsuit with high damage payments is often a sufficient incentive for a company to reduce its emissions "voluntarily."

In addition, the legislator, regulator, or citizen cannot assume that information will be available just because the law says the information must be made public. People have as many motives for hiding as for seeking information. Government officials may resist information disclosure requests that are personally embarrassing, that may lead to public pressure for changes in policy, or that are simply too much work to fulfill. Individual businesses may wish to hide information that might aid potential litigants, government enforcers, or competitors. The best safeguards against this are stiff penalties for violating the law, including sanctions against false reporting as well as against failure to report, backed up by strong enforcement and multiple ways to obtain the information.

For example, in the case of government-held information subject to FOIA-like laws, allowing an independent branch of government -- the courts or the legislature -- free access to the documents raises the specter that any documents withheld could eventually be discovered. Also, protecting whistleblowers adds to the possibility that some other person within the government could reveal the unlawful action. In the case of privately held information, strict government enforcement of reporting and disclosure laws will create a disincentive to withhold data. The possibility of criminal sanctions against knowing violators can have a marked impact. Also, allowing private citizens to file lawsuits and invoke the discovery powers of the courts is a powerful safeguard.

Next, the mere availability of information will not promote a fairer and more efficient environmental protection system unless the public is able to process that information and employ it constructively. Information access mechanisms should be designed, wherever

possible, to produce information that is readily understandable by a non-technical audience. In addition, the government and non-profit environmental groups should sponsor or support efforts to train citizens and citizen groups in how to obtain, analyze, and employ available information to benefit their communities and the environment at large.

Finally, information laws must be developed and implemented in a manner that ensures that the gathering -- rather than the use -- of information does not become the sole goal of the government agency or citizen. Acquiring information may become so much of a focus that the recipient confuses that task with the task of doing its job, or uses that task as an excuse. For example, an agency might become so involved in generating information about hazardous waste sites that it does not have the time or resources to clean up the sites.

As a country develops new information laws, it must not forget that information is merely a tool -- albeit a fundamental one -- for advancing environmental protection goals. If someone steals my car, finding out the identity of the thief is fundamental to seeking redress. However, that knowledge alone will not return my car to me. The information gained through access laws -- be it about a car thief or an environmental polluter -- must be put to use through legal, political, or public media channels in order to obtain the redress that is desired.

Appendix A

List of Acronyms
Used in the Working Paper

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List of Acronyms Used in the Working Paper

ATSDR	Agency for Toxic Substances and Disease Registry
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act (also referred to as Superfund)
CFCs	Chlorofluorocarbons
C.F.R.	Code of Federal Regulations
DMRs	Discharge monitoring reports
ECRA	New Jersey Environmental Cleanup Responsibility Act
EIA	Environmental impact assessment
ELI	Environmental Law Institute
EPA	Environmental Protection Agency
EPCRA	Emergency Planning and Community Right-to-Know Act
FIFRA	Federal Insecticide, Fungicide, and Rodenticide Act
FOIA	Freedom of Information Act
GAO	General Accounting Office
MSDSs	Material safety data sheets
NEPA	National Environmental Policy Act
NGO	Non-governmental organization
OSHA	Occupational Safety and Health Administration
OSH Act	Occupational Safety and Health Act
RCRA	Resource Conservation and Recovery Act
SARA	Superfund Amendments and Reauthorization Act
SIC	Standard Industrial Classification
SMCRA	Surface Mining Control and Reclamation Act
TRI	Toxics Release Inventory
TSCA	Toxic Substances Control Act
U.S.C.	United States Code

Appendix B

U.S. Clean Water Act
Self-Monitoring and Reporting Requirements:

1. Federal Water Pollution Control (Clean Water) Act,
33 U.S.C. §1318

2. Implementing Regulations,
40 C.F.R. §122.41

§1318. [FWPCA §308]
Inspections, monitoring, and entry

SEC. 308. (a) Whenever required to carry out the objective of this Act, including but not limited to (1) developing or assisting in the development of any effluent limitation, or other limitation, prohibition, or effluent standard, pretreatment standard, or standard of performance under this Act; (2) determining whether any person is in violation of any such effluent limitation, or other limitation, prohibition or effluent standard, pretreatment standard, or standard of performance; (3) any requirement established under this section; or (4) carrying out section 305, 311, 402, 404 (relating to State permit programs), *405* and 504 of this Act—

(A) the Administrator shall require the owner or operator of any point source to (i) establish and maintain such records, (ii) make such reports, (iii) install, use, and maintain such monitoring equipment or methods (including where appropriate, biological monitoring methods), (iv) sample such effluents (in accordance with such methods, at such locations, at such intervals, and in such manner as the Administrator shall prescribe), and (v) provide such other information as he may reasonably require; and

(B) the Administrator or his authorized representative *(including an authorized contractor acting as a representative of the Administrator)*, upon presentation of his credentials—

(i) shall have a right of entry to, upon, or through any premises in which an effluent source is located in or which any records required to be maintained under clause (A) of this subsection are located, and

(ii) may at reasonable times have access to any copy and records, inspect any monitoring equipment or method required under clause (A), and sample any effluents which the owner or operator of such sources is required to sample under such clause.

(b) Any records, reports, or information obtained under this section (1) shall, in the case of effluent data, be related to any applicable effluent limitations, toxic pretreatment, or new source performance standards, and (2) shall be available to the public, except that upon a showing satisfactory to the Administrator by any person that records, reports, or information, or particular part thereof (other than effluent data), to which the Administrator has access under this section, if made public would divulge methods or processes entitled to protection as trade secrets of such person, the Administrator shall consider such record, report, or information, or particular portion thereof confidential in accordance with the purposes of section 1905 of title 18 of the United States Code[,]. [except that such record, report, or information may be disclosed to other officers, employees, or authorized representatives of the United States concerned with carrying out this Act or when relevant in any proceeding under this Act.] *Any authorized representative of the Administrator (including an authorized contractor acting as a representative of the Administrator) who knowingly or willfully publishes, divulges, discloses, or makes known in any manner or to any extent not authorized by law any information which is required to be considered confidential under this subsection shall be fined not more than $1,000 or imprisoned not more than 1 year, or both. Nothing in this subsection shall prohibit the Administrator or an authorized representative of the Administrator (including any authorized contractor acting as a representative of the Administrator) from disclosing records, reports, or information to other officers, employees, or authorized representatives of the United States concerned with carrying out this Act or when relevant in any proceeding under this Act.*

(c) Each State may develop and submit to the Administrator procedures under State law for inspection, monitoring, and entry with respect to point sources located in such State. If the Administrator finds that the procedures and the law of any State relating to inspection, monitoring, and entry are applicable to at least the same extent as those required by this section, such State is authorized to apply and enforce its procedures for inspection, monitoring, and entry with respect to point sources located in such State (except with respect to point sources owned or operated by the United States).

(d) ACCESS BY CONGRESS.—Notwithstanding any limitation contained in this section or any other provision of law, all information reported to or otherwise obtained by the Administrator (or any representative of the Administrator) under this Act shall be made available, upon written request of any duly authorized committee of Congress, to such committee.

(June 30, 1948, ch. 758, tit. III, §308, as added Oct. 18, 1972, Pub.L. 92-500, §2, 86 Stat. 858, and amended Dec. 27, 1977, Pub.L. 95-217, §67(c)(1), 91 Stat. 1606; Feb. 4, 1987, Pub.L. 100-4, tit. III, §310, 101 Stat. 41, tit. IV, §406(d)(1), 101 Stat. 73.)

Subpart C—Permit Conditions

§ 122.41 Conditions applicable to all permits (applicable to State programs, see § 123.25).

The following conditions apply to all NPDES permits. Additional conditions applicable to NPDES permits are in § 122.42. All conditions applicable to NPDES permits shall be incorporated into the permits either expressly or by reference. If incorporated by reference, a specific citation to these regulations (or the corresponding approved State regulations) must be given in the permit.

(a) *Duty to comply.* The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Clean Water Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application.

(1) The permittee shall comply with effluent standards or prohibitions established under section 307(a) of the Clean Water Act for toxic pollutants and with standards for sewage sludge use or disposal established under section 405(d) of the CWA within the time provided in the regulations that establish these standards or prohibitions or standards for sewage sludge use or disposal, even if the permit has not yet been modified to incorporate the requirement.

(2) The Clean Water Act provides that any person who violates section 301, 302, 306, 307, 308, 318 or 405 of the Act, or any permit condition or limitation implementing any such sections in a permit issued under section 402, or any requirement imposed in a pretreatment program approved under sections 402(a)(3) or 402(b)(8) of the Act, is subject to a civil penalty not to exceed $25,000 per day for each violation. The Clean Water Act provides that any person who *negligently* violates sections 301, 302, 306, 307, 308, 318, or 405 of the Act, or any condition or limitation implementing any of such sections in a permit issued under section 402 of the Act, or any requirement imposed in a pretreatment program approved under section 402(a)(3) or 402(b)(8) of the Act, is subject to criminal penalties of $2,500 to $25,000 per day of violation, or imprisonment of not more than 1 year, or both. In the case of a second or subsequent conviction for a negligent violation, a person shall be subject to criminal penalties of not more than $50,000 per day of violation, or by imprisonment of not more than 2 years, or both. Any person who *knowingly* violates such sections, or such conditions or limitations is subject to criminal penalties of $5,000 to $50,000 per day of violation, or imprisonment for not more than 3

years, or both. In the case of a second or subsequent conviction for a knowing violation, a person shall be subject to criminal penalties of not more than $100,000 per day of violation, or imprisonment of not more than 6 years, or both. Any person who knowingly violates section 301, 302, 303, 306, 307, 308, 318 or 405 of the Act, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of the Act, and who knows at that time that he thereby places another person in imminent danger of death or serious bodily injury, shall, upon conviction, be subject to a fine of not more than $250,000 or imprisonment of not more than 15 years, or both. In the case of a second or subsequent conviction for a knowing endangerment violation, a person shall be subject to a fine of not more than $500,000 or by imprisonment of not more than 30 years, or both. An organization, as defined in section 309(c)(3)(B)(iii) of the CWA, shall, upon conviction of violating the imminent danger provision, be subject to a fine of not more than $1,000,000 and can be fined up to $2,000,000 for second or subsequent convictions.

(3) Any person may be assessed an administrative penalty by the Administrator for violating section 301, 302, 306, 307, 308, 318 or 405 of this Act, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of this Act. Administrative penalties for Class I violations are not to exceed $10,000 per violation, with the maximum amount of any Class I penalty assessed not to exceed $25,000. Penalties for Class II violations are not to exceed $10,000 per day for each day during which the violation continues, with the maximum amount of any Class II penalty not to exceed $125,000.

(b) *Duty to reapply.* If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a new permit.

(c) *Need to halt or reduce activity not a defense.* It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

(d) *Duty to mitigate.* The permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

(e) *Proper operation and maintenance.* The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit.

(f) *Permit actions.* This permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

(g) *Property rights.* This permit does not convey any property rights of any sort, or any exclusive privilege.

(h) *Duty to provide information.* The permittee shall furnish to the Director, within a reasonable time, any information which the Director may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The permittee shall also furnish to the Director upon request, copies of records required to be kept by this permit.

(i) *Inspection and entry.* The permittee shall allow the Director, or an authorized representative (including an authorized contractor acting as a representative of the Administrator), upon presentation of credentials and

(iii) The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan;

(2) *Anticipated noncompliance.* The permittee shall give advance notice to the Director of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

(3) *Transfers.* This permit is not transferable to any person except after notice to the Director. The Director may require modification or revocation and reissuance of the permit to change the name of the permittee and incorporate such other requirements as may be necessary under the Clean Water Act. (See § 122.61; in some cases, modification or revocation and reissuance is mandatory.)

(4) *Monitoring reports.* Monitoring results shall be reported at the intervals specified elsewhere in this permit.

(i) Monitoring results must be reported on a Discharge Monitoring Report (DMR) or forms provided or specified by the Director for reporting results of monitoring of sludge use or disposal practices.

(ii) If the permittee monitors any pollutant more frequently than required by the permit using test procedures approved under 40 CFR part 136 or, in the case of sludge use or disposal, approved under 40 CFR part 136 unless otherwise specified in 40 CFR part 503, or as specified in the permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR or sludge reporting form specified by the Director.

(iii) Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified by the Director in the permit.

(5) *Compliance schedules.* Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date.

(6) *Twenty-four hour reporting.* (i) The permittee shall report any noncompliance which may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the permittee becames aware of the circumstances. A written submission shall also be provided within 5 days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

(ii) The following shall be included as information which must be reported within 24 hours under this paragraph.

(A) Any unanticipated bypass which exceeds any effluent limitation in the permit. (See § 122.41(g).

(B) Any upset which exceeds any effluent limitation in the permit.

(C) Violation of a maximum daily discharge limitation for any of the pollutants listed by the Director in the permit to be reported within 24 hours. (See § 122.44(g).)

(iii) The Director may waive the written report on a case-by-case basis for reports under paragraph (1)(6)(ii) of this section if the oral report has been received within 24 hours.

(7) *Other noncompliance.* The permittee shall report all instances of noncompliance not reported under paragraphs (1) (4), (5), and (6) of this section, at the time monitoring reports are submitted. The reports shall contain the information listed in paragraph (1)(6) of this section.

(8) *Other information.* Where the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Director, it shall promptly submit such facts or information.

other documents as may be required by law, to:

(1) Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;

(2) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

(3) Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and

(4) Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act, any substances or parameters at any location.

(j) *Monitoring and records.* (1) Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.

(2) Except for records of monitoring information required by this permit related to the permittee's sewage sludge use and disposal activities, which shall be retained for a period of at least five years (or longer as required by 40 CFR part 503), the permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of the sample, measurement, report or application. This period may be extended by request of the Director at any time.

(3) Records of monitoring information shall include:

(i) The date, exact place, and time of sampling or measurements;

(ii) The individual(s) who performed the sampling or measurements;

(iii) The date(s) analyses were performed;

(iv) The individual(s) who performed the analyses;

(v) The analytical techniques or methods used; and

(vi) The results of such analyses.

(4) Monitoring results must be conducted according to test procedures approved under 40 CFR part 136 or, in the case of sludge use or disposal, approved under 40 CFR part 136 unless otherwise specified in 40 CFR part 503, unless other test procedures have been specified in the permit.

(5) The Clean Water Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than $10,000, or by imprisonment for not more than 2 years, or both. If a conviction of a person is for a violation committed after a first conviction of such person under this paragraph, punishment is a fine of not more than $20,000 per day of violation, or by imprisonment of not more than 4 years, or both.

(k) *Signatory requirement.* (1) All applications, reports, or information submitted to the Director shall be signed and certified. (See § 122.22)

(2) The CWA provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or non-compliance shall, upon conviction, be punished by a fine of not more than $10,000 per violation, or by imprisonment for not more than 6 months per violation, or by both.

(l) *Reporting requirements.* (1) *Planned changes.* The permittee shall give notice to the Director as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when:

(i) The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in § 122.29(b); or

(ii) The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in the permit, nor to notification requirements under § 122.42(a)(1).

(m) *Bypass*—(1) *Definitions.* (i) *Bypass* means the intentional diversion of waste streams from any portion of a treatment facility.

(ii) *Severe property damage* means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

(2) *Bypass not exceeding limitations.* The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of paragraphs (m)(3) and (m)(4) of this section.

(3) *Notice*—(i) *Anticipated bypass.* If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least ten days before the date of the bypass.

(ii) *Unanticipated bypass.* The permittee shall submit notice of an unanticipated bypass as required in paragraph (l)(6) of this section (24-hour notice).

(4) *Prohibition of bypass.* (i) Bypass is prohibited, and the Director may take enforcement action against a permittee for bypass, unless:

(A) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;

(B) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and

(C) The permittee submitted notices as required under paragraph (m)(3) of this section.

(ii) The Director may approve an anticipated bypass, after considering its adverse effects, if the Director determines that it will meet the three conditions listed above in paragraph (m)(4)(i) of this section.

(n) *Upset*—(1) *Definition. Upset* means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

(2) *Effect of an upset.* An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the requirements of paragraph (n)(3) of this section are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.

(3) *Conditions necessary for a demonstration of upset.* A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:

(i) An upset occurred and that the permittee can identify the cause(s) of the upset;

(ii) The permitted facility was at the time being properly operated; and

(iii) The permittee submitted notice of the upset as required in paragraph (l)(6)(ii)(B) of this section (24 hour notice).

(iv) The permittee complied with any remedial measures required under paragraph (d) of this section.

(4) *Burden of proof.* In any enforcement proceeding the permittee seeking to establish the occurrence of an upset has the burden of proof.

Appendix C

Sample Discharge Monitoring Report

Chambers Works
Deepwater, New Jersey 08023

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Phone: 609/540-2173
Fax: 609/540-2991

November 23, 1992

Mr. Charles Lynch
NJDEPE
Wastewater Facilities Regulation Element
Bureau of Information Systems
CN 029
Trenton, NJ 08625-0029

Dear Mr. Lynch:

MONTHLY MONITORING REPORT - OCTOBER 1992
National Pollutant Discharge Elimination System
Permit No. NJ 0051000
E. I. Du Pont de Nemours & Company, Inc.
Chambers Works, Deepwater, New Jersey

Attached is the October 1992 Monitoring Report for Chambers Works Discharges required by NJPDES Conditions 9(e), 10 and 12.

The report represents the contribution of specified parameters to the Delaware River by one Major Outfall (001), nine Minor Outfalls (Number 002, 003, 005, 007-011 and 013), and our Wastewater Treatment Plant Outfall (661). Where applicable, intake number 101 values are used to determine the net values for the major and minor outfalls.

There were no discharges in Minor Outfalls 007, 008 and 010, and Stormwater Outfalls 017 and 018 were eliminated in accordance with Paragraph H of the January 4, 1989 supplemental letter to the June 27, 1989 Administrative Consent Order.

The values reported in the attached document (DMR) are estimates of the true concentrations and as such they reflect variations in the sampling and measurement process. These estimates reflect changes in the precision of the measurement process that are bound to occur over time.

Very truly yours,

W. R. Mendez
Business Unit Manager
Environmental Resources

WRM/ldm
PK#1
Attach.

cc: *Regional Administrator
Region II
NJ Environmental Protection Agency
26 Federal Plaza
New York, NY 10278
Attn: Permits Administration Branch

*Executive Director
Delaware River Basin Commission
P.O. Box 7360
West Trenton, NJ 08628

*Mr. Edward Post
NJ Dept. of Environmental Protection & Energy
Division of Water Resources
Southern Regional Office
20 East Clementon Road, Suite 301S
Gibbsboro, NJ 08026

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES

Figure 3

MONITORING REPORT — TRANSMITTAL SHEET

NJPDES NO.	REPORTING PERIOD MO. YR.		MO. YR.
0 0 0 5 1 0 1 0	1 0 1 9 2	THRU	1 0 1 9 2

PERMITTEE: Name E. I. DuPont de Nemours

Address 1007 Market Street

Wilmington, DE 19801

FACILITY: Name E. I. DuPont de Nemours

Address Chambers Works, Pennsville Township

Deepwater, NJ 08023-0999 (County) Salem

Telephone (609) 540-4106

FORMS ATTACHED *(Indicate Quantity of Each)*

SLUDGE REPORTS - SANITARY

☐ T-VWX-007 ☐ T-VWX-008 ☐ T-VWX-009

SLUDGE REPORTS - INDUSTRIAL

☐ T-VWX-010A ☐ T-VWX-010B

WASTEWATER REPORTS

☐ T-VWX-011 ☐ T-VWX-012 ☐ T-VWX-013

GROUNDWATER REPORTS

☐ VWX-015(A,B) ☐ VWX-016 ☐ VWX-017

NPDES DISCHARGE MONITORING REPORT

☒ 3 EPA FORM 3320-1

OPERATING EXCEPTIONS

	YES	NO
DYE TESTING	☐	☒
TEMPORARY BYPASSING	☐	☒
DISINFECTION INTERRUPTION	☐	☒
MONITORING MALFUNCTIONS	☐	☒
UNITS OUT OF OPERATION	☒	☐
OTHER	☐	☒

(Detail any "Yes" on reverse side in appropriate space.)

NOTE: *The "Hours Attended at Plant" on the reverse of this sheet must also be completed.*

AUTHENTICATION - I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment.

LICENSED OPERATOR

Name *(Printed)* James L. Akker

Grade & Registry No. N-4 N0057

Signature [signature]

Date NOV. 18, 1992

PRINCIPAL EXECUTIVE OFFICER or DULY AUTHORIZED REPRESENTATIVE

Name *(Printed)* Rand Mendez

Title *(Printed)* Environmental Treatment Manager

Signature [signature]

Date 11/24/92

OPERATING EXCEPTIONS DETAILED

Figure 3 Continued

- LIME SLURRY TANK (T-34) WAS TAKEN DOWN FOR INSPECTION, BASED ON THE INSPECTION, THE BOTTOM AND PART OF THE SIDE OF THE TANK WERE REPLACED.

- CF-61 (PRIMARY CLARIFIER) WAS TAKEN OUT OF SERVICE WAS TAKEN DOWN IN PREPARATION TO REMOVE SAND. THE SAND HAS NOT YET BEEN REMOVED.

- SURGE TANK (TS 500) WAS TAKEN DOWN TO WORK ON ROOF.

- CF 162 (SECONDARY CLARIFIER) WAS DOWN FOR REPAIRS AND BACK IN SERVICE ON 10/2.

PGT 11-18-9
JAllen 11-24-9

HOURS ATTENDED AT PLANT

Month 10 Year 92

Day of Month	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Licensed Operator	0	8	0	0	8	0	0	8	8	0	0	8	8	8	8	0
Others																
Day of Month	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	
Licensed Operator	0	0	0	0	0	8	0	0	0	8	8	8	8	4	0	
Others																

NAME E.I. DU PONT DE NEMOURS
ADDRESS CHAMBERS WORKS
DEEPWATER, NJ 08023
FACILITY E.I. DUPONT DE NEMOURS
LOCATION DEEPWATER, NJ 08023
DMR NUMBER: 92100245

DISCHARGE MONITORING REPORT (DMR) (2-16)

NJ0005100 — PERMIT NUMBER (17-19)

661 A — DISCHARGE NUMBER

MONITORING PERIOD

	YEAR	MO	DAY		YEAR	MO	DAY
FROM	92	10	08	TO	92	10	08
	(20-21)	(22-23)	(24-25)		(26-27)	(28-29)	(30-31)

PRIORITY POLLUTANT SCAN

known as 662 at Chambers Works

MAJOR SALES

SOUTHERN REGION

NOTE: Read Instructions before completing this form.

PARAMETER (32-37)		(3 Card Only) QUANTITY OR LOADING (46-53) AVERAGE	(54-61) MAXIMUM	UNITS	(4 Card Only) QUALITY OR CONCENTRATION (38-45) MINIMUM	(46-53) AVERAGE	(54-61) MAXIMUM	UNITS	NO. EX (62-63)	FREQUENCY OF ANALYSIS (64-68)	SAMPLE TYPE (69-70)
1,1,1-Trichloroethane	SAMPLE MEASUREMENT	********* *********	********* *********	**** ****	********* *********	********* *********	ND	ug/l	00	ONCE MONTH	Grab
	PERMIT REQUIREMENT	********* *********	********* *********	**** ****	********* *********	********* *********	REPORT			MONTHLY	GRAB
1,1,2,2-Tetrachloroethane	SAMPLE MEASUREMENT	********* *********	********* *********	**** ****	********* *********	********* *********	ND	ug/l	00	ONCE MONTH	Grab
	PERMIT REQUIREMENT	********* *********	********* *********	**** ****	********* *********	********* *********	REPORT			MONTHLY	GRAB
1,1,2-Trichloroethane	SAMPLE MEASUREMENT	********* *********	********* *********	**** ****	********* *********	********* *********	ND	ug/l	00	ONCE MONTH	Grab
	PERMIT REQUIREMENT	********* *********	********* *********	**** ****	********* *********	********* *********	REPORT			MONTHLY	GRAB
1,1-Dichloroethane	SAMPLE MEASUREMENT	********* *********	********* *********	**** ****	********* *********	********* *********	ND	ug/l	00	ONCE MONTH	Grab
	PERMIT REQUIREMENT	********* *********	********* *********	**** ****	********* *********	********* *********	REPORT			MONTHLY	GRAB
1,1-Dichloroethylene	SAMPLE MEASUREMENT	********* *********	********* *********	**** ****	********* *********	********* *********	ND	ug/l	00	ONCE MONTH	Grab
	PERMIT REQUIREMENT	********* *********	********* *********	**** ****	********* *********	********* *********	REPORT			MONTHLY	GRAB
1,2,4-Trichlorobenzene	SAMPLE MEASUREMENT	********* *********	********* *********	**** ****	********* *********	********* *********	ND	ug/l	00	ONCE MONTH	Comp 24
	PERMIT REQUIREMENT	********* *********	********* *********	**** ****	********* *********	********* *********	REPORT			MONTHLY	24 HR COMP
1,2-Dichlorobenzene	SAMPLE MEASUREMENT	********* *********	********* *********	**** ****	********* *********	********* *********	4.76	ug/l	00	ONCE MONTH	Comp 24
	PERMIT REQUIREMENT	********* *********	********* *********	**** ****	********* *********	********* *********	REPORT			MONTHLY	24 HR COMP

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER

Paul Z. Larson
Vice-President

TYPED OR PRINTED

I CERTIFY UNDER PENALTY OF LAW THAT I HAVE PERSONALLY EXAMINED AND AM FAMILIAR WITH THE INFORMATION SUBMITTED HEREIN; AND BASED ON MY INQUIRY OF THOSE INDIVIDUALS IMMEDIATELY RESPONSIBLE FOR OBTAINING THE INFORMATION, I BELIEVE THE SUBMITTED INFORMATION IS TRUE, ACCURATE AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT. SEE 18 U.S.C. § 1001 AND 33 U.S.C. § 1319. *(Penalties under these statutes may include fines up to $10,000 and or maximum imprisonment of between 6 months and 5 years.)*

JOHN S. SIEG, PLANT MGR.

SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE: AREA CODE 609 | NUMBER 540-4106

DATE: YEAR 92 | MO 11 | DAY 23

COMMENT AND EXPLANATION OF ANY VIOLATIONS *(Reference all attachments here)*

LABS:

AMES TEST
THIRD QUARTER RESULTS

The DSN 001 neat (unconcentrated) test material was evaluated for mutagenic activity in Salmonella typhimurium strains TA98 and TA100. No evidence of mutagenicity was noted. When a 1000-fold concentrate of the test material was assayed, no mutagenic activity was detected.

DSN 661 is known as 662 on Chambers Works. The neat (unconcentrated) test material was evaluated for mutagenic activity in Salmonella typhimurium strains TA98 and TA100. No evidence of mutagenicity was noted. When a 1000-fold concentrate of the test material was assayed, no mutagenic activity was detected.

11/25/92

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if different)
NAME E I DU PONT DE NEMOURS
ADDRESS DU PONT CHAMBERS WORKS
PETROLEUM LAB P-2
DEEPWATER, NJ 08023
FACILITY
LOCATION

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)

Form Approved.
OMB No. 2040-0004.
Approval expires 6-30-91.

NJ0005100 (2-16) PERMIT NUMBER
001A (17-19) DISCHARGE NUMBER

MONITORING PERIOD
FROM YEAR 92 (20-21) MO 10 (22-23) DAY 01 (24-25) TO YEAR 92 (26-27) MO 10 (28-29) DAY 31 (30-31)

MAJOR
SOUTHERN REGION
SALEM
NOTE: Read instructions before completing this form.

DMR NUMBER: 92100245

PARAMETER (32-37)		(3 Card Only) QUANTITY OR LOADING (46-53)	(54-61)	UNITS	(4 Card Only) QUALITY OR CONCENTRATION (38-45)	(46-53)	(54-61)	UNITS	NO. EX (62-63)	FREQUENCY OF ANALYSIS (64-68)	SAMPLE TYPE (69-70)
TEMPERATURE, WATER DEG. CENTIGRADE 00010 1 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	*******	*******		*******	20.9	23.4		0	Continuous	N/A
	PERMIT REQUIREMENT	*******	*******	**** ****	*******	REPORT MNTH AVG	36.7 DLY MAX	DEG.C		CONTINUOUS	N/A
COLOR (PT-CO UNITS) 00080 2 0 EFFLUENT NET VALUE	SAMPLE MEASUREMENT	*******	*******		*******	40.	180.		0	Weekly	Comp24
	PERMIT REQUIREMENT	*******	*******	**** ****	*******	350. MNTH AVG	500. DLY MAX	PT-CO		WEEKLY	COMP24
BOD, 5-DAY (20 DEG. C) 00310 2 0 EFFLUENT NET VALUE	SAMPLE MEASUREMENT	676.	1094.		*******	*******	*******		0	Twice/Week	Comp24
	PERMIT REQUIREMENT	1260. MNTH AVG	7710. DLY MAX	KG/ DAY	*******	*******	*******	**** ***		TWICE/ WEEK	COMP24
PH 00400 1 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	*******	*******		6.1	*******	7.6		0	Continuous	
	PERMIT REQUIREMENT	*******	*******	**** ****	6.0 MINIMUM	*******	9.0 MAXIMUM	SU		CONTINUOUS	
SOLIDS, TOTAL SUSPENDED 00530 2 0 EFFLUENT NET VALUE	SAMPLE MEASUREMENT	-3678.	-2235.		*******	*******	*******		0	Weekly	Comp24
	PERMIT REQUIREMENT	600. MNTH AVG	7M90. DLY MAX	KG/ DAY	*******	*******	*******	**** ***		WEEKLY	COMP24
OIL AND GREASE FREON EXTR-GRAV METH 00556 2 1 EFFLUENT NET VALUE	SAMPLE MEASUREMENT	16.	37.		*******	0.1	0.2		0	Once/Month	Grab
	PERMIT REQUIREMENT	*******	******* 5150.	**** ****	*******	REPORT MNTH AVG	10. DLY MAX	MG/L		ONCE/ MONTH	GRAB
NITROGEN, ORGANIC TOTAL (AS N) 00605 2 1 EFFLUENT NET VALUE	SAMPLE MEASUREMENT	169.	169.		*******	*******	*******		0	Once/Month	Comp24
	PERMIT REQUIREMENT	REPORT MNTH AVG	REPORT DLY MAX	KG/ DAY	*******	*******	*******	**** ***		ONCE/ MONTH	COMP24

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER
Paul Z. Larson
Vice-President
TYPED OR PRINTED

I CERTIFY UNDER PENALTY OF LAW THAT I HAVE PERSONALLY EXAMINED AND AM FAMILIAR WITH THE INFORMATION SUBMITTED HEREIN; AND BASED ON MY INQUIRY OF THOSE INDIVIDUALS IMMEDIATELY RESPONSIBLE FOR OBTAINING THE INFORMATION, I BELIEVE THE SUBMITTED INFORMATION IS TRUE, ACCURATE AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT. SEE 18 USC § 1001 AND 33 USC § 1319. (Penalties under these statutes may include fines up to $10,000 and/or maximum imprisonment of between 6 months and 5 years.)

JOHN S. SIEG, PLANT MGR
SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE: AREA CODE 609 | NUMBER 540-4106

DATE: YEAR 92 | MO 11 | DAY 23

COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

EACH QUARTER TEST AND REPORT FOR MUTAGENICITY AS PER PART II OF THE FINAL PERMIT (PAGES 10-12).

(MUTAGENICITY - AMES TEST) - SEE ATTACHED LABS:

EPA Form 3320-1 (Rev. 9-88) Previous editions may be used. (REPLACES EPA FORM T-40 WHICH MAY NOT BE USED.)

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if different)
NAME E I DU PONT DE NEMOURS
ADDRESS DU PONT CHAMBERS WORKS
PETROLEUM LAB P-2
DEEPWATER, NJ 08023
FACILITY
LOCATION

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)

(2-16) NJ0005100 PERMIT NUMBER
(17-19) 001A DISCHARGE NUMBER

MONITORING PERIOD
FROM YEAR 92 MO 10 DAY 01 (20-21) (22-23) (24-25)
TO YEAR 92 MO 10 DAY 31 (26-27) (28-29) (30-31)

MAJOR
SOUTHERN REGION

SALEM

NOTE: Read instructions before completing this form.

Form Approved.
OMB No. 2040-0004.
Approval expires 6-30-91.

DMR NUMBER: 92100245

PARAMETER (32-37)		(3 Card Only) QUANTITY OR LOADING (46-53)	(54-61)	UNITS	(4 Card Only) QUALITY OR CONCENTRATION (38-45)	(46-53)	(54-61)	UNITS	NO. EX (62-63)	FREQUENCY OF ANALYSIS (64-68)	SAMPLE TYPE (69-70)
NITROGEN, AMMONIA TOTAL (AS N) 00610 2 0 EFFLUENT NET VALUE	SAMPLE MEASUREMENT	2323.	5246.	KG/ DAY	******	16.	36.	MG/L	0	Weekly	Comp 24
	PERMIT REQUIREMENT	[redacted] MNTH AVG	[redacted] DLY MAX		******	REPORT MNTH AVG	[redacted] DLY MAX			WEEKLY	COMP 24
NITROGEN, NITRITE TOTAL (AS N) 00615 2 1 EFFLUENT NET VALUE	SAMPLE MEASUREMENT	30.	30.	KG/ DAY	******	******	******	**** ***	0	once/month	Comp 24
	PERMIT REQUIREMENT	REPORT MNTH AVG	REPORT DLY MAX		******	******	******	**** ***		ONCE/ MONTH	COMP 24
NITROGEN, NITRATE TOTAL (AS N) 00620 2 1 EFFLUENT NET VALUE	SAMPLE MEASUREMENT	1696.	1696.	KG/ DAY	******	******	******	**** ***	0	once/month	Comp 24
	PERMIT REQUIREMENT	REPORT MNTH AVG	REPORT DLY MAX		******	******	******	**** ***		ONCE/ MONTH	COMP 24
PHOSPHORUS, TOTAL (AS P) 00665 2 1 EFFLUENT NET VALUE	SAMPLE MEASUREMENT	121.	121.	KG/ DAY	******	******	******	**** ***	0	once/month	Comp 24
	PERMIT REQUIREMENT	REPORT MNTH AVG	REPORT DLY MAX		******	******	******	**** ***		ONCE/ MONTH	COMP 24
CARBON, DISSOLVED ORGANIC (AS C) 00681 2 0 EFFLUENT NET VALUE	SAMPLE MEASUREMENT	2035.	6005.	KG/ DAY	******	******	******	**** ***	0	Daily	Comp 24
	PERMIT REQUIREMENT	[redacted] MNTH AVG	[redacted] DLY MAX		******	******	******	**** ***		DAILY	COMP 24
CYANIDE, TOTAL (AS CN) 00720 2 0 EFFLUENT NET VALUE	SAMPLE MEASUREMENT	6.8	24.5	KG/ DAY	******	******	******	**** ***	0	Weekly	Comp 24
	PERMIT REQUIREMENT	[redacted] MNTH AVG	[redacted] DLY MAX		******	******	******	**** ***		WEEKLY	COMP 24
FLUORIDE, TOTAL (AS F) 00951 2 0 EFFLUENT NET VALUE	SAMPLE MEASUREMENT	2847.	4537.	KG/ DAY	******	******	******	**** ***	0	Weekly	Comp 24
	PERMIT REQUIREMENT	[redacted] MNTH AVG	[redacted] DLY MAX		******	******	******	**** ***		WEEKLY	COMP 24

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER
Paul Z. Larson
Vice-President
TYPED OR PRINTED

I CERTIFY UNDER PENALTY OF LAW THAT I HAVE PERSONALLY EXAMINED AND AM FAMILIAR WITH THE INFORMATION SUBMITTED HEREIN, AND BASED ON MY INQUIRY OF THOSE INDIVIDUALS IMMEDIATELY RESPONSIBLE FOR OBTAINING THE INFORMATION, I BELIEVE THE SUBMITTED INFORMATION IS TRUE, ACCURATE AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT. SEE 18 USC § 1001 AND 33 USC § 1319. (Penalties under these statutes may include fines up to $10,000 and/or maximum imprisonment of between 6 months and 5 years.)

JOHN S. SIEG, PLANT MGR.
SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE: AREA CODE 609 | NUMBER 540-4106

DATE: YEAR 92 | MO 11 | DAY 23

COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)
EACH QUARTER TEST AND REPORT FOR MUTAGENICITY AS PER PART II OF THE FINAL PERMIT (PAGES 10-12).

Appendix D

Chart of Comparative Information Access Provisions in the United States, Canada, and Western Europe by David Sarokin, EPA

COMPARISON OF NATIONAL AND INTERNATIONAL TOXIC CHEMICAL INVENTORIES

	UNITED STATES	CANADA	UNITED KINGDOM	THE NETHERLANDS	THE EUROPEAN COMMUNITY
Title of Inventory	Toxics Release Inventory	National Pollutant Release Inventory	Chemical Release Inventory	The Emission Inventory (part of the larger Emission Inventory of the Netherlands which estimates emissions from cars, population, and other non-industrial sources)	Polluting Emissions Register
Status	Active since 1987	planned for 1994	Under consideration	Active since 1981	Under consideration
Who Must Report	more than 20,000 manufacturing facilities	any facility or organization which meets the threshold	many major industrial polluting processes	In the current survey, 2,000 installations, including the 58 largest emitters and 800 large combustion sources	All installations above threshold carrying out listed activities
Threshold	-10 or more employees -facilities which manufacture more than 25,000 pounds, or otherwise use more than 10,000 pounds of a listed chemical.	-10 or more employees -facilities which manufacture, process, or use more than 10,000 kgs of a listed chemical	none	Currently, only the largest sources (out of 20,000 facilities) are included	-more than 20 employees -thresholds based on emissions (not use)
Chemicals Covered	around 320 chemicals and chemical categories	178 chemicals and chemical categories; the same chemicals and chemical categories on the United States' list, excluding those chemicals with low volume reporting	expected to cover around 300 chemicals, including radioactive substances	all emissions of concern--about 700 chemicals	
Environmental Media on which Facilities are Required to Report	air, water, land, and transfers to sewage treatment plants or off-site facilities	air, water, land, and transfers to sewage treatment plants or off-site facilities	air, water, land	air, water	all environmental media

	UNITED STATES	CANADA	UNITED KINGDOM	THE NETHERLANDS	THE EUROPEAN COMMUNITY
Frequency of Reporting	every year	every year	every year	every other year	
Unit of Reporting	individual facilities	individual facilities	individual facilities based on each permitted source at the facility	individual units within a facility (e.g. boilers, cracking units)	individual facilities
Public Access	active right-to-know and public outreach of data	right-to-know access is planned	public will have access to data and standardized reports	data on individual facilities is confidential; aggregated data is periodically reported to the public	data available to public via public registers
How Data is Reported	paper and magnetic-media	magnetic-media only			as specified by each Member country
Authority which Requires Reporting	Congress, under the Emergency Planning and Community Right-to-Know Act	Environment Canada: legal authority in the short term is being sought under Section 16 of the Canadian Environmental Protection Act; legal authority in the long term is being sought using legislative authority	Parliament, under the Environmental Protection Act	Two ministries the Ministry of Housing, Physical Planning and Environment and the Ministry of Transport and Public Works	EC regulations under consideration
Participation: Mandatory or Voluntary	mandatory	mandatory	mandatory to obtain an authorization from the government to continue operating, the emissions data must be submitted	voluntary but participation is virtually 100%	mandatory
Data Management	Computerized	Computerized	Computerization is under consideration		each country manages data as it sees fit

SPECIAL PROJECTS OFFICE DAVID SAROKIN, ACTING DIRECTOR EPA TS-792a 202-260-8907 phone 202-260-1764 fax

Appendix E

U.S. Freedom of Information Act
5 U.S.C. §552

Freedom of Information Act
5 U.S.C. §552

§552.
Public information; agency rules, opinions, orders, records, and proceedings

(a) Each agency shall make available to the public information as follows:

(1) Each agency shall separately state and currently publish in the Federal Register for the guidance of the public—

(A) descriptions of its central and field organization and the established places at which, the employees (and in the case of a uniformed service, the members) from whom, and the methods whereby, the public may obtain information, make submittals or requests, or obtain decisions;

(B) statements of the general course and method by which its functions are channeled and determined, including the nature and requirements of all formal and informal procedures available;

(C) rules of procedure, descriptions of forms available or the places at which forms may be obtained, and instructions as to the scope and contents of all papers, reports, or examinations;

(D) substantive rules of general applicability adopted as authorized by law, and statements of general policy or interpretations of general applicability formulated and adopted by the agency; and

(E) each amendment, revision, or repeal of the foregoing.

Except to the extent that a person has actual and timely notice of the terms thereof, a person may not in any manner be required to resort to, or be adversely affected by, a matter required to be published in the Federal Register and not so published. For the purpose of this paragraph, matter reasonably available to the class of persons affected thereby is deemed published in the Federal Register when incorporated by reference therein with the approval of the Director of the Federal Register.

(2) Each agency, in accordance with published rules, shall make available for public inspection and copying—

(A) final opinions, including concurring and dissenting opinions, as well as orders, made in the adjudication of cases;

(B) those statements of policy and interpretations which have been adopted by the agency and are not published in the Federal Register; and

(C) administrative staff manuals and instructions to staff that affect a member of the public;

unless the materials are promptly published and copies offered for sale. To the extent required to prevent a clearly unwarranted invasion of personal privacy, an agency may delete identifying details when it makes available or publishes an opinion, statement of policy, interpretation, or staff manual or instruction. However, in each case the justification for the deletion shall be explained fully in writing. Each agency shall also maintain and make available for public inspection and copying current indexes providing identifying information for the public as to any matter issued, adopted, or promulgated after July 4, 1967, and required by this paragraph to be made available or published. Each agency shall promptly publish, quarterly or more frequently, and distribute (by sale or otherwise) copies of each index or supplements thereto unless it determines by order published in the Federal Register that the publication would be unnecessary and impracticable, in which case the agency shall nonetheless provide copies of such index on request at a cost not to exceed the direct cost of duplication. A final order, opinion, statement of policy, interpretation, or staff manual or instruction that affects a member of the public may be relied on, used, or cited as precedent by an agency against a party other than an agency only if—

(i) it has been indexed and either made available or published as provided by this paragraph; or

(ii) the party has actual and timely notice of the terms thereof.

(3) Except with respect to the records made available under paragraphs (1) and (2) of this subsection, each agency, upon any request for records which (A) reasonably describes such records and (B) is made in accordance with published rules stating the time, place, fees (if any), and procedures to be followed, shall make the records promptly available to any person.

(4)(A)(i) In order to carry out the provisions of this section, each agency shall promulgate regulations, pursuant to notice and receipt of public comment, specifying the schedule of fees applicable to the processing of requests under this section and establishing procedures and guidelines for determining when such fees should be waived or reduced. Such schedule shall conform to the guidelines which shall be promulgated, pursuant to notice and receipt of public comment, by the Director of the Office of Management and Budget and which shall provide for a uniform schedule of fees for all agencies

(ii) Such agency regulations shall provide that—

(I) fees shall be limited to reasonable standard charges for document search, duplication and review, when records are requested for commercial use;

(II) fees shall be limited to reasonable standard charges for document duplication when records are not sought for commercial use and the request is made by an educational or noncommercial scientific institution, whose purpose is scholarly or scientific research; or a representative of the news media; and

(III) for any request not described in (I) or (II), fees shall be limited to reasonable standard charges for document search and duplication.

(iii) Documents shall be furnished without any charge or at a charge reduced below the fees established under clause (ii) if disclosure of the information is in the public interest because it is likely to contribute significantly to public understanding of the operations or activities of the government and is not primarily in the commercial interest of the requester.

(iv) Fee schedules shall provide for the recovery of only the direct costs of search, duplication, or review. Review costs shall include only the direct costs incurred during the initial examination of a document for the purposes of determining whether the documents must be disclosed under this section and for the purposes of withholding any portions exempt from disclosure under this section. Review costs may not include any costs incurred in resolving issues of law or policy that may be raised in the course of processing a request under this section. No fee may be charged by any agency under this section—

(I) if the costs of routine collection and processing of the fee are likely to equal or exceed the amount of the fee; or

(II) for any request described in clause (ii) (II) or (III) of this subparagraph for the first two hours of search time or for the first one hundred pages of duplication.

(v) No agency may required advance payment of any fee unless the requester has previously failed to pay fees in a timely fashion, or the agency has determined that the fee will exceed $250.

(vi) Nothing in this subparagraph shall supersede fees chargeable under a statute specifically providing for setting the level of fees for particular types of records.

(vii) In any action by a requester regarding the waiver of fees under this section, the court shall determine the matter de novo: *Provided*, That the court's review of the matter shall be limtied to the record before the agency.

(B) On complaint, the district court of the United States in the district in which the complainant resides, or has his principal place of business, or in which the agency records are situated, or in the District of Columbia, has jurisdiction to enjoin the agency from withholding agency records and to order the production of any agency records improperly withheld from the complainant. In such a case the court shall determine the matter de novo, and may examine the contents of such agency records in camera to determine whether such records or any part thereof shall be withheld under any of the exemptions set forth in subsection (b) of this section, and the burden is on the agency to sustain its action.

(C) Notwithstanding any other provision of law, the defendant shall serve an answer or otherwise plead to any complaint made under this subsection within thirty days after service upon the defendant of the pleading in which such complaint is made, unless the court otherwise directs for good cause shown.

[(D) Repealed. Pub.L. 98-620, Title IV, § 402(2), Nov. 8, 1984, 98 Stat. 3357]

(E) The court may assess against the United States reasonable attorney fees and other litigation costs reasonably incurred in any case under this section in which the complainant has substantially prevailed.

(F) Whenever the court orders the production of any agency records improperly withheld from the complainant and assesses against the United States reasonable attorney fees and other litigation costs, and the court additionally issues a written finding that the circumstances surrounding the withholding raise questions whether agency personnel acted arbitrarily or capriciously with respect to the withholding, the Special Counsel shall promptly initiate a proceeding to determine whether disciplinary action is warranted against the officer or employee who was primarily responsible for the withholding. The Special Counsel, after investigation and consideration of the evidence submitted, shall submit his findings and recommendations to the administrative authority of the agency concerned and shall send copies of the findings and recommendations to the officer or employee or his representative. The administrative authority shall take the corrective action that the Special Counsel recommends.

(G) In the event of noncompliance with the order of the court, the district court may punish for contempt the responsible employee, and in the case of a uniformed service, the responsible member.

(5) Each agency having more than one member shall maintain and make available for public inspection a record of the final votes of each member in every agency proceeding.

(6)(A) Each agency, upon any request for records made under paragraph (1), (2), or (3) of this subsection, shall—

(i) determine within ten days (excepting Saturdays, Sundays, and legal public holidays) after the receipt of any such request whether to comply with such request and shall immediately notify the person making such request of such determination and the reasons therefor, and of the right of such person to appeal to the head of the agency any adverse determination; and

(ii) make a determination with respect to any appeal within twenty days (excepting Saturdays, Sundays, and legal public holidays) after the receipt of such appeal. If on appeal the denial of the request for records is in whole or in part upheld, the agency shall notify the person making such request of the provisions for judicial review of that determination under paragraph (4) of this subsection.

(B) In unusual circumstances as specified in this subparagraph, the time limits prescribed in either clause (i) or clause (ii) of subparagraph (A) may be extended by written notice to the person making such request setting forth the reasons for such extension and the date on which a determination is expected to be dispatched. No such notice shall specify a date that would result in an extension for more than ten working days. As used in this subparagraph, "unusual circumstances" means, but only to the extent reasonably necessary to the proper processing of the particular request—

(i) the need to search for and collect the requested records from field facilities or other establishments that are separate from the office processing the request;

(ii) the need to search for, collect, and appropriately examine a voluminous amount of separate and distinct records which are demanded in a single request; or

(iii) the need for consultation, which shall be conducted with all practicable speed, with another agency having a substantial interest in the determination of the request or among two or more components of the agency having substantial subject-matter interest therein.

(C) Any person making a request to any agency for records under paragraph (1), (2), or (3) of this subsection shall be deemed to have exhausted his administrative remedies with respect to such request if the agency fails to comply with the applicable time limit provisions of this paragraph. If the Government can show exceptional circumstances exist and that the agency is exercising due diligence in responding to the request, the court may retain jurisdiction and allow the agency additional time to complete its review of the records. Upon any determination by an agency to comply with a request for records, the records shall be made promptly available to such person making such request. Any notification of denial of any request for records under this subsection shall set forth the names and titles or positions of each person responsible for the denial of such request.

(b) This section does not apply to matters that are—

(1)(A) specifically authorized under criteria established by an Executive order to be kept secret in the interest of national defense or foreign policy and (B) are in fact properly classified pursuant to such Executive order;

(2) related solely to the internal personnel rules and practices of an agency;

(3) specifically exempted from disclosure by statute (other than section 552b of this title), provided that such statute (A) requires that the matters be withheld from the public in such a manner as to leave no discretion on the issue, or (B) establishes particular criteria for withholding or refers to particular types of matters to be withheld;

(4) trade secrets and commercial or financial information obtained from a person and privileged or confidential;

(5) inter-agency or intra-agency memorandums or letters which would not be available by law to a party other than an agency in litigation with the agency;

(6) personnel and medical files and similar files the disclosure of which would constitute a clearly unwarranted invasion of personal privacy;

(7) records or information compiled for law enforcement purposes, but only to the extent that the production of such law enforcement records or information (A) could reasonably be expected to interfere with enforcement proceedings, (B) would deprive a person of a right to a fair trial or an impartial adjudication, (C) could reasonably be expected to constitute an unwarranted invasion of personal privacy, (D) could reasonably be expected to disclose the identity of a confidential source, including a State, local, or foreign agency or authority or any private institution which furnished information on a confidential basis, and, in the case of a record or information compiled by criminal law enforcement authority in the course of a criminal investigation or by an agency conducting a lawful national security intelligence investigation, information furnished by a confidential source, (E) would disclose techniques and procedures for law enforcement investigations or prosecutions, or would disclose guidelines for law enforcement investigations or prosecutions if such disclosure could reasonably be expected to risk circumvention of the law, or (F) could reasonably be expected to endanger the life or physical safety of any individual;

(8) contained in or related to examination, operating, or condition reports prepared by, on behalf of, or for the use of an agency responsible for the regulation or supervision of financial institutions; or

(9) geological and geophysical information and data, including maps, concerning wells.

Any reasonably segregable portion of a record shall be provided to any person requesting such record after deletion of the portions which are exempt under this subsection.

(c)(1) Whenever a request is made which involves access to records described in subsection (b)(7)(A) and—

(A) the investigation or proceeding involves a possible violation of criminal law; and

(B) there is reason to believe that (i) the subject of the investigation or proceeding is not aware of its pendency, and (ii) disclosure of the existence of the records could reasonably be expected to interfere with enforcement proceedings,

the agency may, during only such time as that circumstance continues, treat the records as not subject to the requirements of this section.

(2) Whenever informant records maintained by a criminal law enforcement agency under an informant's name or personal identifier are requested by a third party according to the informant's name or personal identifier, the agency may treat the records as not subject to the requirements of this section unless the informant's status as an informant has been officially confirmed.

(3) Whenever a request is made which involves access to records maintained by the Federal Bureau of Investigation pertaining to foreign intelligence or counterintelligence, or international terrorism, and the existence of the records is classified information as provided in subsection (b)(1), the Bureau may, as long as the existence of the records remains classified information, treat the records as not subject to the requirements of this section.

(d) This section does not authorize withholding of information or limit the availability of records to the public, except as specifically stated in this section. This section is not authority to withhold information from Congress.

(e) On or before March 1 of each calendar year, each agency shall submit a report covering the preceding calendar year to the Speaker of the House of Representatives and President of the Senate for referral to the appropriate committees of the Congress. The report shall include—

(1) the number of determinations made by such agency not to comply with requests for records made to such agency under subsection (a) and the reasons for each such determination;

(2) the number of appeals made by persons under subsection (a)(6), the result of such appeals, and the reason for the action upon each appeal that results in a denial of information;

(3) the names and titles or positions of each person responsible for the denial of records requested under this section, and the number of instances of participation for each;

(4) the results of each proceeding conducted pursuant to subsection (a)(4)(F), including a report of the disciplinary action taken against the officer or employee who was primarily responsible for improperly withholding records or an explanation of why disciplinary action was not taken;

(5) a copy of every rule made by such agency regarding this section;

(6) a copy of the fee schedule and the total amount of fees collected by the agency for making records available under this section; and

(7) such other information as indicates efforts to administer fully this section.

The Attorney General shall submit an annual report on or before March 1 of each calendar year which shall include for the prior calendar year a listing of the number of cases arising under this section, the exemption involved in each case, the disposition of such case, and the cost, fees, and penalties assessed under subsections (a)(4)(E),(F), and (G). Such report shall also include a description of the efforts undertaken by the Department of Justice to encourage agency compliance with this section.

(f) For purposes of this section, the term "agency" as defined in section 551(1) of this title includes any executive department, military department, Government corporation, Government controlled corporation, or other establishment in the executive branch of the Government (including the Executive Office of the President), or any independent regulatory agency.

(Pub.L. 89-554, Sept. 6, 1966, 80 Stat. 383; Pub.L. 90-23, §1, June 5, 1967, 81 Stat. 54; Pub.L. 93-502, §§1-3, Nov. 21, 1974, 88 Stat. 1561-1564; Pub.L. 94-409, §5(b), Sept. 13, 1976, 90 Stat. 1247; Pub.L. 95-454, title IX, §906(a)(10), Oct. 13, 1978, 92 Stat. 1225; Pub.L. 98-620, title IV, §402(2), Nov. 8, 1984, 98 Stat. 3357; Pub.L. 99-570, §§1802-1803, Oct. 27, 1986, 100 Stat. 3207-148.)

Short Title of 1986 Amendments. Section 1801 of Pub.L. 99-570 provided that "This subtitle [which amended this section] may be cited as the Freedom of Information Reform Act of 1986."

Effective Date of 1986 Amendments. Section 1804 of Pub.L. 99-570 provided that:

"(a) The amendments made by section 1802 [which amended subsection (b)(7) and added subsection (c)] shall be effective on the date of enactment of this Act. [Oct. 27, 1986] and shall apply with respect to any requests for records, whether or not the request was made prior to such date, and shall apply to any civil action pending on such date.

"(b)(1) The amendments made by section 1803 [which amended paragraph (4)(A)] shall be effective 180 days after the date of enactment of this Act. [Oct. 27, 1986] except that regulations to implement such amendments shall be promulgated by such 180th day.

"(2) The amendments made by section 1803 [which amended paragraph (4)(A)] shall apply with respect to any requests for records, whether or not the request was made prior to such date, and shall apply to any civil action pending on such date, except that review charges applicable to records requested for commercial use shall not be applied by an agency to requests made before the effective date specified in paragraph (1) of this subsection or before the agency has finally issued its regulations."

Effective Date of 1974 Amendment. Section 4 of Pub.L. 93-502 provided that: "The amendments made by this Act [amending this section] shall take effect on the ninetieth day beginning after the date of enactment of this Act [Nov. 21, 1974]."

Effective Date of 1967 Amendment. Section 4 of Pub.L. 90-23 provided that: "This Act [amending this section] shall be effective July 4, 1967, or on the date of enactment [June 5, 1967], whichever is later."

Appendix F

Sample Freedom of Information Act Request
(from the American Civil Liberties Union's
Step-by-Step Guide to Using the
***Freedom of Information Act*)**

Sample Letters

The bracketed ([ ]) areas explain how to use these sample letters to write your own letter.

Agency Head [or Freedom of Information Officer]
Name of Agency
Address of Agency
City, State, Zip Code
Re: Freedom of Information Act Request

Dear _____:

This is a request under the Freedom of Information Act, 5 U.S.C. Sec. 552.

I request that a copy of the following documents [or documents containing the following information] be provided to me: [identify the documents or information as specifically as possible].

In order to help to determine my status to assess fees, you should know that I am [insert a suitable description of the requester and the purpose of the request].

[Sample requester descriptions:

a representative of the news media affiliated with (a newspaper, magazine, television station, etc., or a public interest organization that publishes or disseminates information etc.), and this request is made as part of news gathering and not for a commercial use.

affiliated with an educational or noncommercial scientific institution, and this request is made for a scholarly or scientific purpose and not for a commercial use.

an individual seeking information for personal use and not for a commercial use.

affiliated with a private corporation and am seeking information for use in the company's business.]

[Optional] I am willing to pay fees for this request up to a maximum of $[ ]. If you estimate that the fees will exceed this limit, please inform me first.

[Optional] I request a waiver of all fees for this request. Disclosure of the requested information to me is in the public interest because it is likely to contribute significantly to public understanding of the operations or activities of the government and is not primarily in my commercial interest. [Include a specific explanation.]

Thank you for your consideration of this request.

Sincerely,

Name
Address
City, State, Zip Code
Telephone Number [optional]

Freedom of Information Act Request Letter

Agency Head or Appeal Officer
Name of Agency
Address of Agency
City, State, Zip Code
Re: Freedom of Information Act Appeal

Dear _____:

This is an appeal under the Freedom of Information Act.

On [date], I requested documents under the Freedom of Information Act. My request was assigned the following identification number: [00-000-00].

On [date], I received a response to my request in a letter signed by [name of official]. I appeal the denial of my request.

[Optional] The documents that were withheld must be disclosed under the FOIA because * * *.

[Optional] I appeal the decision to deny my request for a waiver of fees. I believe that I am entitled to a waiver of fees. Disclosure of the documents I requested is in the public interest because the information is likely to contribute significantly to public understanding of the operations or activities of the government and is not primarily in my commercial interests. [provide details]

[Optional] I appeal the decision to require me to pay review costs for this request. I am not seeking the documents for commercial use. [provide details]

[Optional] I appeal the decision to require me to pay search charges for this request. I am a reporter seeking information as part of news gathering and not for commercial use.

Thank you for your consideration of this appeal.

Sincerely,

Name
Address
City, State, Zip Code
Telephone Number [optional]

Freedom of Information Act Appeal Letter

Request for "Public Interest" Waiver or Reduction of Fees Letter

[The request for a fee waiver is sent: first, to the office handling your initial request, and second, if not granted initially, a fee waiver letter is sent to the agency's FOIA appeals office. If you are appealing deletions or withholdings you can combine this material on the fee waiver in the same letter, or you can write two separate appeal letters.]

Dear _____:

This letter constitutes my request for a waiver of fees in connection with my request of [date] under the FOIA for the [briefly describe the documents requested]. As you know, you have provided me with portions of the requested items and assessed a cost of $[ ].

I have requested and here repeat my request that you waive these fees on the grounds that disclosure "is likely to contribute significantly to public understanding of the operations or activities of the government and is not primarily in the commercial interest of the requester."

The language of the FOIA makes clear that Congress intended that the assessment of fees not be a bar to private individuals or public interest groups seeking access to government documents. At the same time, it permitted the charging of fees so that corporations or individuals using the Act primarily for private gain could be charged the cost of the services provided.

The legislative history of the FOIA's provision calls for a liberal interpretation of the fee waiver standard. This suggests that all fees should be waived whenever a requester is seeking information on a subject relating to the manner in which a government agency is carrying out its operations or the manner in which an agency program affects the public. A requester is likely to contribute significantly to public understanding if the information disclosed is new; supports public oversight of agency operations, including the quality of the agency activities and the effect of agency policy or regulations on public health or safety; or otherwise confirms or clarifies data on past or present operations of the government.

The release of this information would benefit the public because _____ [here add explanation of the benefits to the public that would follow from the release. Take however much space you need. If you are writing on behalf of an organization, add something about your group's service to the public. If it is a tax-exempt non-profit organization you should say so, and you may want to include your tax exemption number.]

[If possible, add a paragraph here citing specific cases of identical or similar requests which were granted a fee waiver and that your case likewise merits a fee waiver.]

Finally, since this request is for material which is clearly of benefit to the public, other persons will undoubtedly also request these records. It would be unfair if the first requester were to bear the full material cost of the initial search.

[Use this paragraph in an appeal letter if you have already been refused a reduction of fees and if the fees which have been assessed seem excessively high.] If my request for a waiver of fees is not substantially granted, I request an itemization of the charges I am being assessed.

[Use this paragraph only if you intend to travel to the location where the documents are kept, and know that you do not, in fact, want copies of all documents.] As an alternative to being assessed copying fees, I wish to be granted access to the records which are responsive to my request so that I may review them without incurring duplication costs and may select those which I want copied. As you are aware, Section (a)(3) of the FOIA requires agencies to make documents "promptly available" and Section (a)(4) permits "recovery of only the direct costs of such search and duplication." Therefore, agencies are required by law to make documents available for inspection, but may not require the purchase of copies of documents.

Since the information that is the subject of this letter fits the criteria spelled out by Congress for a waiving of fees in the public interest, I believe that your agency should waive such fees, or, at the very least, reduce them substantially.

Sincerely,

Name
Address
City, State, Zip Code
Telephone Number [optional]

Appendix G

Designing a Right-to-Know Law

APPENDIX G

DESIGNING A RIGHT-TO-KNOW LAW

A right-to-know law can achieve many objectives, including (1) keeping workers informed about the chemicals they encounter in the workplace; (2) allowing the general public to know about the chemicals released by neighboring industries; (3) encouraging local communities to plan for emergency releases; (4) informing emergency responders (such as police or firefighters) about what hazards they may encounter; (5) requiring rapid reporting of acutely dangerous releases in order to facilitate emergency response; and (6) encouraging businesses to reduce the amounts of hazardous chemicals they use and emit into the environment.

The core of each reporting requirement, however, boils down to a straightforward set of parameters: **who** has to report **what** to **whom**, **when**? And **what if** they do not? What follows is a list of questions a lawdrafter may wish to ask in designing a right-to-know law.

1. Who must report?

   - How do you identify which persons must report? by industry? by chemical use?
   - Do you grant exemptions for small users? (measured by size of company, or by volume of chemicals involved)?
   - Are government activities covered too?
   - Are mobile sources covered (*e.g.*, cars, trains, or ships)?

2. What must be disclosed?

   - Which emissions are covered?
     - Will you create a list of covered chemicals?
     - Will you identify the characteristics of chemicals to be covered (*e.g.*, all explosives, all radioactive chemicals, all strong acids or bases, *etc.*)?
   - What activities must be reported?
     - Does the mere use of the chemical trigger reporting? How about storage over a certain length of time? Transportation? Discharge to the environment? (Total discharges, or broken down by medium?)
     - Do activities involving small amounts of chemicals have to be reported, or is there some minimum weight or volume that triggers the obligation? Is the threshold level the same for all chemicals, or is it lower for more dangerous chemicals?
   - What information must be in the report?
     - What chemicals are present, stored, transported, used, or discharged?
     - How much of each chemical is present, stored, transported, used, or discharged?

- Where in the facility is the chemical present, stored, transported, used, or discharged?
- What are the dangerous characteristics of those chemicals?
- What should emergency responders or employees know about safe handling of those chemicals?
- What is the site's history of injuries?

3. To whom is the information disclosed? Who else may have access to it? Under what conditions?

   - To government regulators?
   - To local emergency planners or responders?
   - To health care providers?
   - To workers?
   - To the neighboring public?
   - To potential victims/litigants?
   - To citizen enforcers?
   - Are all groups entitled to access under equivalent conditions? For example, do emergency health care providers need complete and immediate access to information about chemical exposure, even if that information compromises trade secrets? Is a competing business entitled to learn what chemicals a plant uses?

4. When must the information be disclosed?

   - Before exposure or use? (Useful for workers, emergency planners, emergency responders, and the concerned public.)
   - Periodically after release or use? (Useful for policymakers, public health officials, potential victims of exposures, and sometimes to people seeking to enforce discharge limits under other laws.)
   - Immediately after unexpected releases? (Useful for emergency responders and the nearby public.)
   - On demand?

5. What action can be taken if the information is not released?

   - Administrative sanctions?
   - Civil penalties?
   - Criminal penalties?
   - Citizen enforcement actions?

6. How will the data be organized once it is collected?

7. What protection should be offered for commercially valuable data?

8. How will government-collected information be disseminated?

   - Routinely to certain officials and groups?
   - On request to the news media or the public?
   - Through a public education campaign?
   - On a need-to-know basis?
   - For a fee? (To commercial requesters only?)

9. Can state and local governments require additional data reporting?

10. What collateral changes could be made in other laws to make the right-to-know provisions more effective in discouraging careless use of hazardous chemicals?

    - Stronger liability provisions for toxic torts?
    - Stronger protection for corporate whistleblowers who report non-compliance?
    - Labor relations laws facilitating the efforts of trade unions to represent the grievances of exposed workers?
    - Laws that permit local governments to enact restrictions on chemical use?
    - Laws governing the siting of new facilities?
    - Laws that allow citizens to sue to enforce environmental statutes?
    - Legal bars against issuance of permits or award of government contracts to facilities with records of environmental violations?

Appendix H

Toxics Release Inventory and Trade Secret Provisions of U.S. Emergency Planning and Community Right-to-Know Act, 42 U.S.C. §§11023, 11042

§11023. [EPCRA §313]

Toxic chemical release forms

(a) BASIC REQUIREMENT.—The owner or operator of a facility subject to the requirements of this section shall complete a toxic chemical release form as published under subsection (g) for each toxic chemical listed under subsection (c) that was manufactured, processed, or otherwise used in quantities exceeding the toxic chemical threshold quantity established by subsection (f) during the preceding calendar year at such facility. Such form shall be submitted to the Administrator and to an official or officials of the State designated by the Governor on or before July 1, 1988, and annually thereafter on July 1 and shall contain data reflecting releases during the preceding calendar year.

(b) COVERED OWNERS AND OPERATORS OF FACILITIES.—

(1) IN GENERAL.—(A) The requirements of this section shall apply to owners and operators of facilities that have 10 or more full-time employees and that are in Standard Industrial Classification Codes 20 through 39 (as in effect on July 1, 1985) and that manufactured, processed, or otherwise used a toxic chemical listed under subsection (c) in excess of the quantity of that toxic chemical established under subsection (f) during the calendar year for which a release form is required under this section.

(B) The Administrator may add or delete Standard Industrial Classification Codes for purposes of subparagraph (a), but only to the extent necessary to provide that each Standard Industrial Code to which this section applies is relevant to the purposes of this section.

(C) For purposes of this section—

(i) The term "manufacture" means to produce, prepare, import, or compound a toxic chemical.

(ii) The term "process" means the preparation of a toxic chemical, after its manufacture, for distribution in commerce—

(I) in the same form or physical state as, or in a different form or physical state from, that in which it was received by the person so preparing such chemical, or

(II) as part of an article containing the toxic chemical.

(2) DISCRETIONARY APPLICATION TO ADDITIONAL FACILITIES.—The Administrator, on his own motion or at the request of a Governor of a State (with regard to facilities located in that State), may apply the requirements of this section to the owners and operators of any particular facility that manufactures, processes, or otherwise uses a toxic chemical listed under subsection (c) if the Administrator determines that such action is warranted on the basis of toxicity of the toxic chemical, proximity to other facilities that release the toxic chemical or to population centers, the history of releases of such chemical at such facility, or such other factors as the Administrator deems appropriate.

(c) TOXIC CHEMICALS COVERED.—The toxic chemicals subject to the requirements of this section are those chemicals on the list in Committee Print Number 99–169 of the Senate Committee on Environment and Public Works, titled "Toxic Chemicals Subject to Section 313 of the Emergency Planning and Community Right-To-Know Act of 1986" (including any revised version of the list as may be made pursuant to subsection (d) or (e)).

(d) REVISIONS BY ADMINISTRATOR.—

(1) IN GENERAL.—The Administrator may by rule add or delete a chemical from the list described in subsection (c) at any time.

(2) ADDITIONS.—A chemical may be added if the Administrator determines, in his judgment, that there is sufficient evidence to establish any one of the following:

(A) The chemical is known to cause or can reasonably be anticipated to cause significant adverse acute human health effects at concentration levels that are reasonably likely to exist beyond facility site boundaries as a result of continuous, or frequently recurring, releases.

(B) The chemical is known to cause or can reasonably be anticipated to cause in humans—

(i) cancer or teratogenic effects, or

(ii) serious or irreversible—

(I) reproductive dysfunctions,

(II) neurological disorders,

(III) heritable genetic mutations, or
(IV) other chronic health effects.

(C) The chemical is known to cause or can reasonably be anticipated to cause, because of—
(i) its toxicity,
(ii) its toxicity and persistence in the environment, or
(iii) its toxicity and tendency to bioaccumulate in the environment,
a significant adverse effect on the environment of sufficient seriousness, in the judgment of the Administrator, to warrant reporting under this section. The number of chemicals included on the list described in subsection (c) on the basis of the preceding sentence may constitute in the aggregate no more than 25 percent of the total number of chemicals on the list.

A determination under this paragraph shall be based on generally accepted scientific principles or laboratory tests, or appropriately designed and conducted epidemiological or other population studies, available to the Administrator.

(3) DELETIONS.—A chemical may be deleted if the Administrator determines there is not sufficient evidence to establish any of the criteria described in paragraph (2).

(4) EFFECTIVE DATE.—Any revision made on or after January 1 and before December 1 of any calendar year shall take effect beginning with the next calendar year. Any revision made on or after December 1 of any calendar year and before January 1 of the next calender year shall take effect beginning with the calendar year following such next calendar year.

(e) PETITIONS.—

(1) IN GENERAL.—Any person may petition the Administrator to add or delete a chemical from the list described in subsection (c) on the basis of the criteria in subparagraph (A) or (B) of subsection (d)(2). Within 180 days after receipt of a petition, the Administrator shall take one of the following actions:
(A) Initiate a rulemaking to add or delete the chemical to the list, in accordance with subsection (d)(2) or (d)(3).
(B) Publish an explanation of why the petition is denied.

(2) GOVERNOR PETITIONS.—A State Governor may petition the Administrator to add or delete a chemical from the list described in subsection (c) on the basis of the criteria in subparagraph (A), (B), or (C) of subsection (d)(2). In the case of such a petition from a State Governor to delete a chemical, the petition shall be treated in the same manner as a petition received under paragraph (1) to delete a chemical. In the case of such a petition from a State Governor to add a chemical, the chemical will be added to the list within 180 days after receipt of the petition, unless the Administrator—
(A) initiates a rulemaking to add the chemical to the list, in accordance with subsection (d)(2), or
(B) publishes an explanation of why the Administrator believes the petition does not meet the requirements of subsection (d)(2) for adding a chemical to the list.

(f) THRESHOLD FOR REPORTING.—

(1) TOXIC CHEMICAL THRESHOLD AMOUNT.—The threshold amounts for purposes of reporting toxic chemicals under this section are as follows:
(A) With respect to a toxic chemical used at a facility, 10,000 pounds of the toxic chemical per year.
(B) With respect to a toxic chemical manufactured or processed at a facility—
(i) For the toxic chemical release form required to be submitted under this section on or before July 1, 1988, 75,000 pounds of the toxic chemical per year.
(ii) For the form required to be submitted on or before July 1, 1989, 50,000 pounds of the toxic chemical per year.
(iii) For the form required to be submitted on or before July 1, 1990, and for each form thereafter, 25,000 pounds of the toxic chemical per year.

(2) REVISIONS.—The Administrator may establish a threshold amount for a toxic chemical different from the amount established by paragraph (1). Such revised threshold shall obtain reporting on a substantial majority of total releases of the chemical at all facilities subject to the requirements of this section. The amounts established under this paragraph may, at the Administrator's discretion, be based on classes of chemicals or categories of facilities.

(g) FORM.—

(1) INFORMATION REQUIRED.—Not later than June 1, 1987, the Administrator shall publish a uniform toxic chemical release form for facilities covered by this section. If the Administrator does not publish such a form, owners and operators of facilities subject to the requirements of this section shall provide the information required under this subsection by letter postmarked on or before the date on which the form is due. Such form shall—
(A) provide for the name and location of, and principal business activities at, the facility;
(B) include an appropriate certification, signed by a senior official with management responsibility for the person or persons completing the report, regarding the accuracy and completeness of the report; and
(C) provide for submission of each of the following items of information for each listed toxic chemical known to be present at the facility:
(i) Whether the toxic chemical at the facility is manufactured, processed, or otherwise used, and the general category or categories of use of the chemical.
(ii) An estimate of the maximum amounts (in ranges) of the toxic chemical present at the facility at any time during the preceding calendar year.
(iii) For each wastestream, the waste treatment or disposal methods employed, and an estimate of the treatment efficiency typically achieved by such methods for that wastestream.
(iv) The annual quantity of the toxic chemical entering each environmental medium.

(2) USE OF AVAILABLE DATA.—In order to provide the information required under this section, the owner or operator of a facility may use readily available data (including monitoring data) collected pursuant to other provisions of law, or, where such data are not readily available, reasonable estimates of the amounts involved. Nothing in this section requires the monitoring or measurement of the quantities, concentration, or frequency of any toxic chemical released into the environment beyond that monitoring and measurement required under other provisions of law or regulation. In order to assure consistency, the Administrator shall require that data be expressed in common units.

(h) USE OF RELEASE FORM.—The release forms required under this section are intended to provide information to the Federal, State, and local governments and the public, including citizens of communities surrounding covered facilities. The release form shall be available, consistent with section 324(a), to inform persons about releases of toxic chemicals to the environment; to assist governmental agencies, researchers, and other persons in the conduct of research and data gathering; to aid in the development of appropriate regulations, guidelines, and standards; and for other similar purposes.

(i) MODIFICATIONS IN REPORTING FREQUENCY.—

(1) IN GENERAL.—The Administrator may modify the frequency of submitting a report under this section, but the Administrator may not modify the frequency to be any more often than annually. A modification may apply, either nationally or in a specific geographic area, to the following:
(A) All toxic chemical release forms required under this section.
(B) A class of toxic chemicals or a category of facilities.
(C) A specific toxic chemical.
(D) A specific facility.

(2) REQUIREMENTS.—A modification may be made under paragraph (1) only if the Administrator—
(A) makes a finding that the modification is consistent with the provisions of subsection (h), based on—
(i) experience from previously submitted toxic chemical release forms, and
(ii) determinations made under paragraph (3), and
(B) the finding is made by a rulemaking in accordance with section 553 of title 5, United States Code.

(3) DETERMINATIONS.—The Administrator shall make the following determinations with respect to a proposed modification before making a modification under paragraph (1):
(A) The extent to which information relating to the proposed modification provided on the toxic chemical release forms has been used by the Administrator or other agencies of the Federal Government, States, local governments, health professionals, and the public.
(B) The extent to which the information is (i) readily available to potential users from other sources, such as State reporting programs, and (ii) provided to the Administrator under another Federal law or through a State program.
(C) The extent to which the modification would impose additional and unreasonable burdens on facilities subject to the reporting requirements under this section.

(4) 5-YEAR REVIEW.—Any modification made under this subsection shall be reviewed at least once every 5 years. Such review shall examine the modification and ensure that the requirements of paragraphs (2) and (3) still justify continuation of the modification. Any change to a modification reviewed under this paragraph shall be made in accordance with this subsection.

(5) NOTIFICATION TO CONGRESS.—The Administrator shall notify Congress of an intention to initiate a rulemaking for a

modification under this subsection. After such notification, the Administrator shall delay initiation of the rulemaking for at least 12 months, but no more than 24 months, after the date of such notification.

(6) JUDICIAL REVIEW.—In any judicial review of a rulemaking which establishes a modification under this subsection, a court may hold unlawful and set aside agency action, findings, and conclusions found to be unsupported by substantial evidence.

(7) APPLICABILITY.—A modification under this subsection may apply to a calendar year or other reporting period beginning no earlier than January 1, 1993.

(8) EFFECTIVE DATE.—Any modification made on or after January 1 and before December 1 of any calendar year shall take effect beginning with the next calendar year. Any modification made on or after December 1 of any calendar year and before January 1 of the next calendar year shall take effect beginning with the calendar year following such next calendar year.

(j) EPA MANAGEMENT OF DATA.—The Administrator shall establish and maintain in a computer data base 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.

(k) REPORT.—Not later than June 30, 1991, the Comptroller General, in consultation with the Administrator and appropriate officials in the States, shall submit to the Congress a report including each of the following:

(1) A description of the steps taken by the Administrator and the States to implement the requirements of this section, including steps taken to make information collected under this section available to and accessible by the public.

(2) A description of the extent to which the information collected under this section has been used by the Environmental Protection Agency, other Federal agencies, the States, and the public, and the purposes for which the information has been used.

(3) An identification and evaluation of options for modifications to the requirements of this section for the purpose of making information collected under this section more useful.

(l) MASS BALANCE STUDY.—

(1) IN GENERAL.—The Administrator shall arrange for a mass balance study to be carried out by the National Academy of Sciences using mass balance information collected by the Administrator under paragraph (3). The Administrator shall submit to Congress a report on such study no later than 5 years after the date of the enactment of this title.

(2) PURPOSES.—The purposes of the study are as follows:

(A) To assess the value of mass balance analysis in determining the accuracy of information on toxic chemical releases.

(B) To assess the value of obtaining mass balance information, or portions thereof, to determine the waste reduction efficiency of different facilities, or categories of facilities, including the effectiveness of toxic chemical regulations promulgated under laws other than this title.

(C) To assess the utility of such information for evaluating toxic chemical management practices at facilities, or categories of facilities, covered by this section.

(D) To determine the implications of mass balance information collection on a national scale similar to the mass balance information collection carried out by the Administrator under paragraph (3), including implications of the use of such collection as part of a national annual quantity toxic chemical release program.

(3) INFORMATION COLLECTION.—(A) The Administrator shall acquire available mass balance information from States which currently conduct (or during the 5 years after the date of enactment of this title initiate) a mass balance-oriented annual quantity toxic chemical release program. If information from such States provides an inadequate representation of industry classes and categories to carry out the purposes of the study, the Administrator also may acquire mass balance information necessary for the study from a representative number of facilities in other States.

(B) Any information acquired under this section shall be available to the public, except that upon a showing satisfactory to the Administrator by any person that the information (or a particular part thereof) to which the Administrator or any officer, employee, or representative has access under this section if made public would divulge information entitled to protection under section 1905 of title 18, United States Code, such information or part shall be considered confidential in accordance with the purposes of that section, except that such information or part may be disclosed to other officers, employees, or authorized representatives of the United States concerned with carrying out this section.

(C) The Administrator may promulgate regulations prescribing procedures for collecting mass balance information under this paragraph.

(D) For purposes of collecting mass balance information under subparagraph (A), the Administrator may require the submission of information by a State or facility.

(4) MASS BALANCE DEFINITION.—For purposes of this subsection, the term "mass balance" means an accumulation of the annual quantities of chemicals transported to a facility, produced at a facility, consumed at a facility, used at a facility, accumulated at a facility, released from a facility, and transported from a facility as a waste or as a commercial product or byproduct or component of a commercial product or byproduct.

(Pub.L. 99-499, tit. III, §313, Oct. 17, 1986, 100 Stat. 1741.)

§11042. [EPCRA §322]

Trade secrets

(a) AUTHORITY TO WITHHOLD INFORMATION.—

(1) GENERAL AUTHORITY.—(A) With regard to a hazardous chemical, an extremely hazardous substance, or a toxic chemical, any person required under section 303(d)(2), 303(d)(3), 311, 312, or 313 to submit information to any other person may withhold from such submittal the specific chemical identity (including the chemical name and other specific identification), as defined in regulations prescribed by the Administrator under subsection (c), if the person complies with paragraph (2).

(B) Any person withholding the specific chemical identity shall, in the place on the submittal where the chemical identity would normally be included, include the generic class or category of the hazardous chemical, extremely hazardous substance, or toxic chemical (as the case may be).

(2) REQUIREMENTS.—(A) A person is entitled to withhold information under paragraph (1) if such person—

(i) claims that such information is a trade secret, on the basis of the factors enumerated in subsection (b),

(ii) includes in the submittal referred to in paragraph (1) an explanation of the reasons why such information is claimed to be a trade secret, based on the factors enumerated in subsection (b), including a specific description of why such factors apply, and

(iii) submits to the Administrator a copy of such submittal, and the information withheld from such submittal.

(B) In submitting to the Administrator the information required by subparagraph (A)(iii), a person withholding information under this subsection may—

(i) designate, in writing and in such manner as the Administrator may prescribe by regulation, the information which such person believes is entitled to be withheld under paragraph (1), and

(ii) submit such designated information separately from other information submitted under this subsection.

(3) LIMITATION.—The authority under this subsection to withhold information shall not apply to information which the Administrator has determined, in accordance with subsection (c), is not a trade secret.

(b) TRADE SECRET FACTORS.—No person required to provide information under this title may claim that the information is entitled to protection as a trade secret under subsection (a) unless such person shows each of the following:

(1) Such person has not disclosed the information to any other person, other than a member of a local emergency planning committee, an officer or employee of the United States or a State or local government, an employee of such person, or a person who is bound by a confidentiality agreement, and such person has taken reasonable measures to protect the confidentiality of such information and intends to continue to take such measures.

(2) The information is not required to be disclosed, or otherwise made available, to the public under any other Federal or State law.

(3) Disclosure of the information is likely to cause substantial harm to the competitive position of such person.

(4) The chemical identity is not readily discoverable through reverse engineering.

(c) TRADE SECRET REGULATIONS.—As soon as practicable after the date of enactment of this title, the Administrator shall prescribe regulations to implement this section. With respect to subsection (b)(4), such regulations shall be equivalent to comparable provisions in the Occupational Safety and Health Administration Hazard Communication Standard (29 C.F.R. 1910.1200) and any revisions of such standard prescribed by the Secretary of Labor in accordance with the final ruling of the courts of the United States in United Steelworkers of America, AFL–CIO–CLC v. Thorne G. Auchter.

(d) PETITION FOR REVIEW.—

(1) IN GENERAL.—Any person may petition the Administrator for the disclosure of the specific chemical identity of a hazardous chemical, an extremely hazardous substance, or a toxic chemical which is claimed as a trade secret under this section. The Administrator may, in the absence of a petition under this paragraph, initiate a determination, to be carried out in accordance with this subsection, as to whether information withheld constitutes a trade secret.

(2) INITIAL REVIEW.—Within 30 days after the date of receipt of a petition under paragraph (1) (or upon the Administrator's initiative), the Administrator shall review the explanation filed by a trade secret claimant under subsection (a)(2) and determine whether the explanation presents assertions which, if true, are sufficient to support a finding that the specific chemical identity is a trade secret.

(3) FINDING OF SUFFICIENT ASSERTIONS.—

(A) If the Administrator determines pursuant to paragraph (2) that the explanation presents sufficient assertions to support a finding that the specific chemical identity is a trade secret, the Administrator shall notify the trade secret claimant that he has 30 days to supplement the explanation with detailed information to support the assertions.

(B) If the Administrator determines, after receipt of any supplemental supporting detailed information under subparagraph (A), that the assertions in the explanation are true and that the specific chemical identity is a trade secret, the Administrator shall so notify the petitioner and the petitioner may seek judicial review of the determination.

(C) If the Administrator determines, after receipt of any supplemental supporting detailed information under subparagraph (A), that the assertions in the explanation are not true and that the specific chemical identity is not a trade secret, the Administrator shall notify the trade secret claimant that the Administrator intends to release the specific chemical identity. The trade secret claimant has 30 days in which he may appeal the Administrator's determination under this subparagraph to the Administrator. If the Administrator does not reverse his determination under this subparagraph in such an appeal by the trade secret claimant, the trade secret claimant may seek judicial review of the determination.

(4) FINDING OF INSUFFICIENT ASSERTIONS.—

(A) If the Administrator determines pursuant to paragraph (2) that the explanation presents insufficient assertions to support a finding that the specific chemical identity is a trade secret, the Administrator shall notify the trade secret claimant that he has 30 days to appeal the determination to the Administrator, or, upon a showing of good cause, amend the original explanation by providing supplementary assertions to support the trade secret claim.

(B) If the Administrator does not reverse his determination under subparagraph (A) after an appeal or an examination of any supplementary assertions under subparagraph (A), the Administrator shall so notify the trade secret claimant and the trade secret claimant may seek judicial review of the determination.

(C) If the Administrator reverses his determination under subparagraph (A) after an appeal or an examination of any supplementary assertions under subparagraph (A), the procedures under paragraph (3) of this subsection apply.

(e) EXCEPTION FOR INFORMATION PROVIDED TO HEALTH PROFESSIONALS.—Nothing in this section, or regulations adopted pursuant to this section, shall authorize any person to withhold information which is required to be provided to a health professional, a doctor, or a nurse in accordance with section 323.

(f) PROVIDING INFORMATION TO THE ADMINISTRATOR; AVAILABILITY TO PUBLIC.—Any information submitted to the Administrator under subsection (a)(2) or subsection (d)(3) (except a specific chemical identity) shall be available to the public, except that upon a showing satisfactory to the Administrator by any person that the information (or a particular part thereof) to which the Administrator has access under this section if made public would divulge information entitled to protection under section 1905 of title 18, United States Code, such information or part shall be considered confidential in accordance with the purposes of that section, except that such information or part may be disclosed to other officers,

employees, or authorized representatives of the United States concerned with carrying out this title.

(g) INFORMATION PROVIDED TO STATE.—Upon request by a State, acting through the Governor of the State, the Administrator shall provide to the State any information obtained under subsection (a)(2) and subsection (d)(3).

(h) INFORMATION ON ADVERSE EFFECTS.—(1) In any case in which the identity of a hazardous chemical or an extremely hazardous substance is claimed as a trade secret, the Governor or State emergency response commission established under section 301 shall identify the adverse health effects associated with the hazardous chemical or extremely hazardous substance and shall assure that such information is provided to any person requesting information about such hazardous chemical or extremely hazardous substance.

(2) In any case in which the identity of a toxic chemical is claimed as a trade secret, the Administrator shall identify the adverse health and environmental effects associated with the toxic chemical and shall assure that such information is included in the computer database required by section 313(j) and is provided to any person requesting information about such toxic chemical.

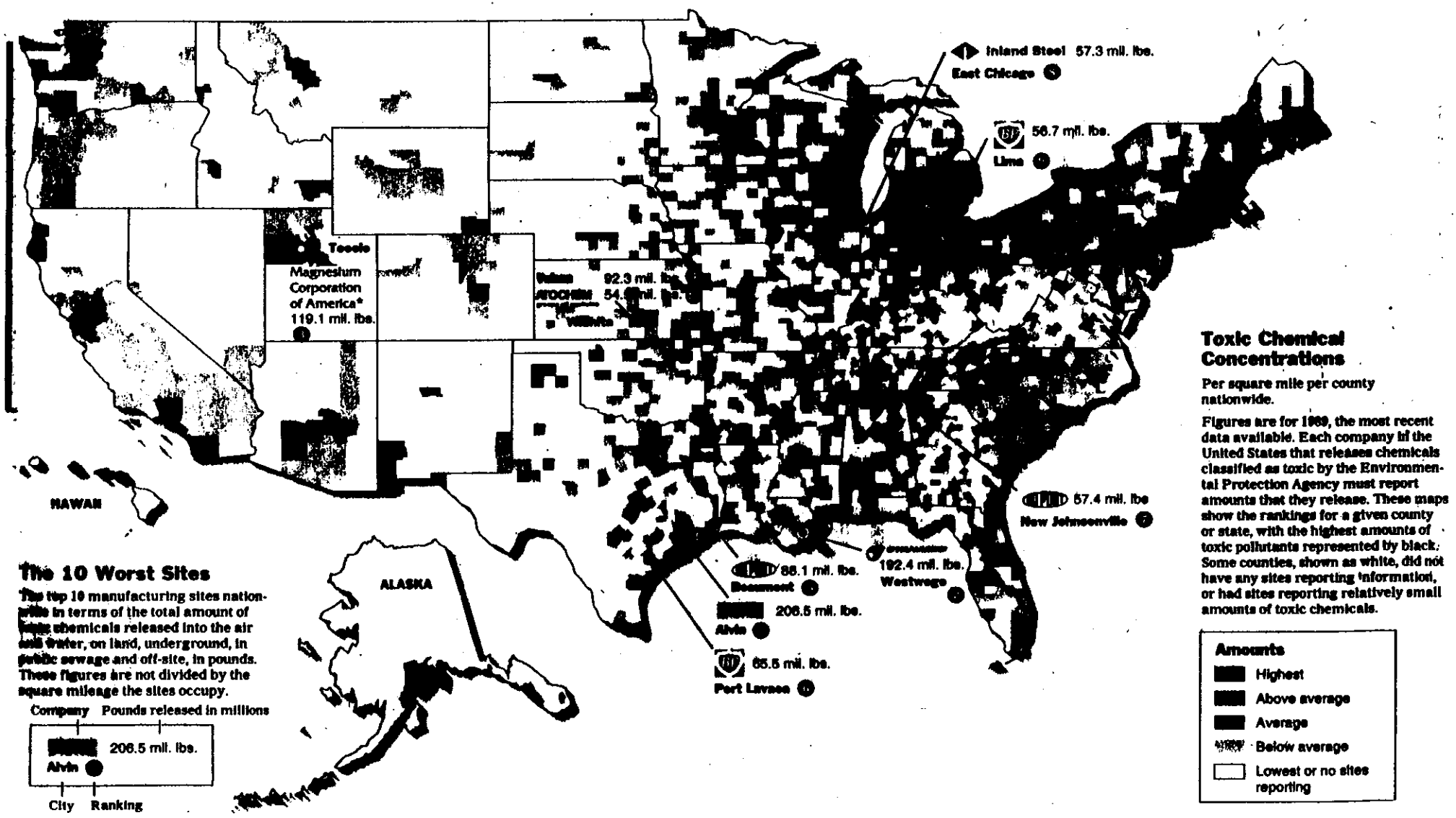
(i) INFORMATION PROVIDED TO CONGRESS.—Notwithstanding any limitation contained in this section or any other provision of law, all information reported to or otherwise obtained by the Administrator (or any representative of the Administrator) under this title shall be made available to a duly authorized committee of the Congress upon written request by such a committee.

(PUB.L. 99-499, tit. III, §322, Oct. 17, 1986, 100 Stat. 1747.)

Appendix J

Newspaper Articles on the Toxics Release Inventory

The Nation's Polluters – Who Emits What, and Where



By JOHN HOLUSHA

Under the spotlight of E.P.A. data, companies start in on cleanups.

SINCE 1987, large manufacturing corporations have been required to report to the Federal Environmental Protection Agency the amount of toxic chemicals they emit into the environment annually. Already, the collected data and its analysis by environmental and research groups have had a powerful impact on corporate behavior.

Some of the nation's largest companies have undertaken campaigns to reduce emissions that they once defended as being within regulatory limits. And regulators are using the data to persuade companies to participate in voluntary efforts to reduce pollution.

Until the Superfund law was revised in 1986, there was no systematic national effort to record chemical emissions at the tens of thousands of industrial sites across the country. Many companies did not even keep such records for their own use. But in the wake of the deadly chemical leak at Union Carbide's plant in Bhopal, India, Congress passed a provision requiring plants to disclose emissions so communities could draft disaster-relief plans.

Last year, more than 22,000 manufacturing plants filed some 82,000 reports with the E.P.A., covering discharges of more than 300 toxic chemicals. The E.P.A. publishes the data, known as the Toxics Release Inventory, with little analysis. But some private groups, notably Citizen Action in Washington (and its subsidiary, Citizens Fund), take the raw data and sort them to identify the biggest polluters, the likely harmful effects of the chemicals emitted and the geographic concentration of emissions.

Publishing the aggregated data has spurred some of the nation's largest companies to change their processes.

E. I. du Pont de Nemours & Company, the largest emitter, has long argued that its injection of dilute salt solutions into deep wells is sound. Yet the company's chairman, Edgar S. Woolard, has said Du Pont will stop the practice by the end of the century — in part because he wants to get the company off the top of the pollution lists.

The Monsanto Corporation, which comes in second in the rankings, has pledged that by 1992 it will cut its toxic emission into the air — as measured by the E.P.A. data — by 90 percent from the 1987 level.

"The Toxics Release Inventory is fast becoming one of the most powerful tools we have to reduce toxic emissions," said William K. Reilly, administrator of the E.P.A., when the figures for 1989 were released earlier this year.

Mr. Reilly asked 600 companies to voluntarily reduce the emission of 17 high-priority toxic chemicals, including benzene, cyanide, mercury and lead, by 33 percent by the end of next year and 50 percent by 1995. Mr. Reilly said the success of pollution-prevention programs would be measured by future T.R.I. reports.

"These reports have had more impact than regulatory programs," said Deborah H. Sheiman, of the Natural Resources Defense Council, an environmental group. She argued, that the information-only approach has done more to reduce toxic air emissions than the Clean Air Act's 20-year-old regulatory program.

"We wanted to know what companies were responsible for emitting toxics, thinking they would come under public pressure to reduce," said Ed Rothschild, public affairs director for Citizen Action. "And it has worked. Many of them have agreed to reductions."

Users of the data acknowledge that the reporting has faults. For one thing, the reports are based on companies' estimates of emissions, rather than on actual measurement. And since all chemicals are reported simply as pounds emitted, the inventory does not distinguish between highly toxic substances and those that pose less of a health danger.

A spokesman for the Chemical Manufacturers Association, whose members include the biggest emitters, stressed that emissions did not necessarily mean health hazards. He noted that some chemicals are broken down into harmless constituents after being released or are dispersed in such a way that they do not come in contact with local communities.

Similarly, because total poundage is reported rather than pounds per unit of production, large companies like Du Pont tend to be at the top of emissions lists because of their size.

NEVERTHELESS, the reporting has had such an effect that environmental advocates want to expand the reporting requirements to add new industries and more chemicals. Legislation to do so has been introduced in the House of Representatives and hearings have been held this year in the Senate.

In a report sponsored by 16 environmental and public-interest groups, Ms. Sheiman cited Government estimates that nonmanufacturers emit twice as much toxic chemicals as are included in the T.R.I. The groups recommended adding atomic weapons plants, electric utilities, hazardous waste incinerators and agricultural and mining operations to the report.

The environmental advocates also want the reporting to include more than 500 chemicals identified as toxic by other environmental legislation or Government agencies. For example, the inventory does not include 140 chemicals regulated as hazardous waste under the Resource Conservation and Recovery Act.

The E.P.A., which has the authority to add chemicals to the reporting requirements and to add other categories of companies that must report, has said it is studying expansion.

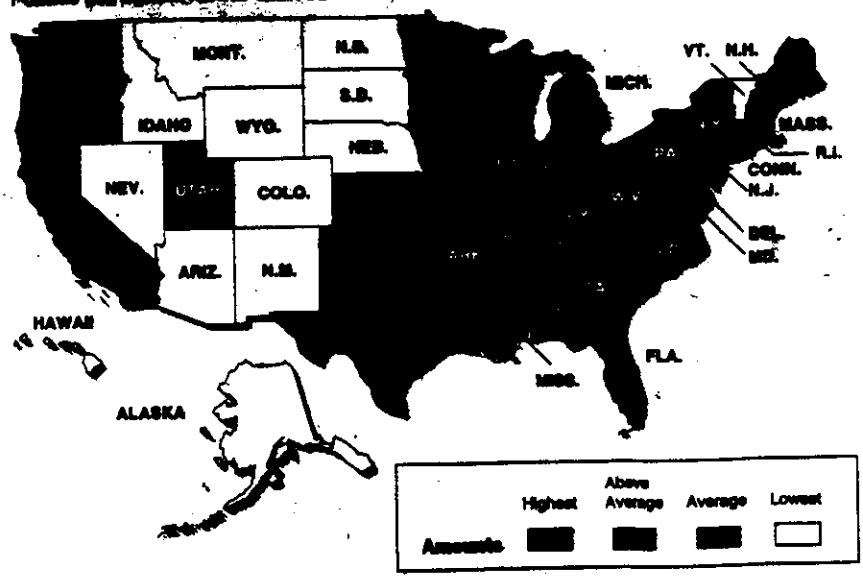
The influence of the toxic emissions data is being multiplied as investors use it for evaluating companies. One group, the Investor Responsibility Research Center in Washington, is analyzing the information to provide environmental profiles of companies for clients, including the California Public Employees Retirement System, Citibank and the Ford Foundation.

Most investors are motivated less by environmental considerations than by the belief that significant emitters are inefficient producers, said Jonathan S. Naimon, an analyst of the group's environmental information service. "The feeling is that companies that emit a lot of toxic waste do not have good financial indications long term," he said.

"A lot of our clients are looking to develop an environmental screen for their portfolios," said Melisa Huhn, who manages the $3 billion "socially responsible" investment group for Scudder, Stevens & Clark, a money management firm in Cincinnati. "One way they do it is by looking at the T.R.I. data and combining it with more subjective information." ■

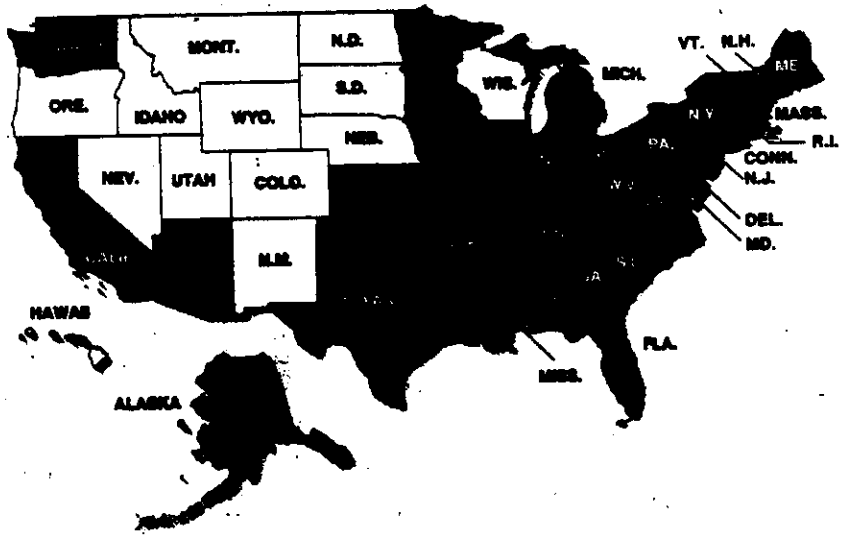
Where the Water Is Tainted

Pounds per square mile in each state.



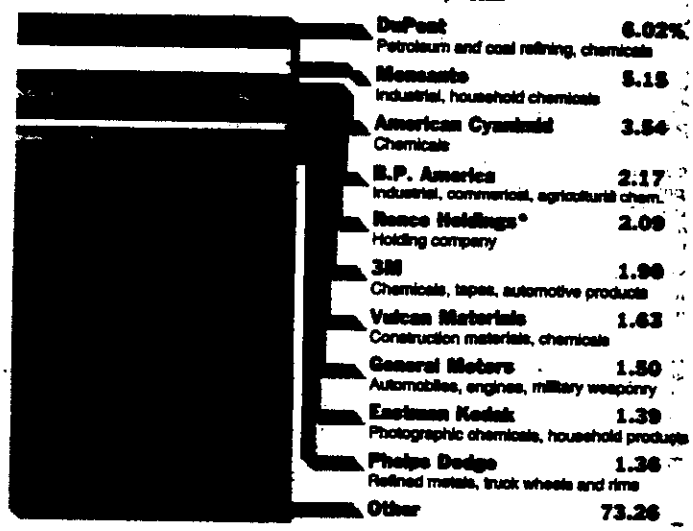
Where the Air Is Bad

Pounds per square mile in each state.



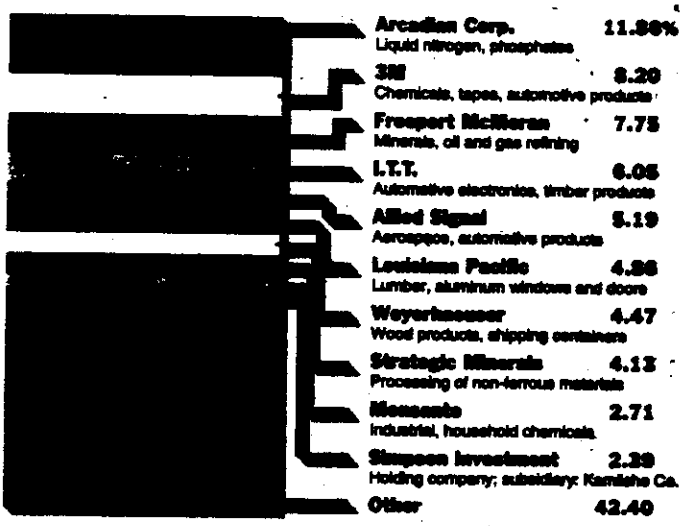
The Top 10 Biggest Polluters

Total amount of toxic chemicals: 5,710,282,027 lbs.
Includes air, water, land, underground, public sewage and off-site releases nationwide.



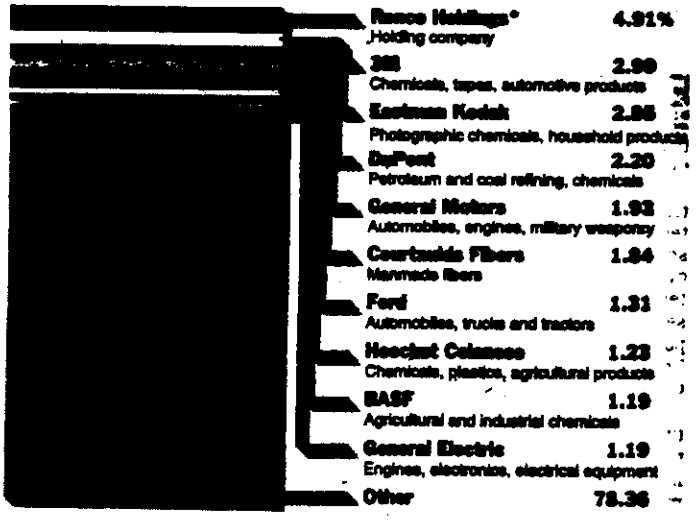
The Top 10 Water Polluters

Total amount of toxic chemicals: 188,994,123 lbs.



The Top 10 Air Polluters

Total amount of toxic chemicals: 2,427,695,968 lbs.



*Part of the Renco Group, which is an iron and steel processing business.

Source: New York Times analysis of Environmental Protection Agency data. Data was compiled by Citizens Fund.

Ty Ahmad-Taylor/The New York Times

For Communities, Knowledge of Polluters is Power

By KEITH SCHNEIDER

WASHINGTON

LAST month the New Orleans Times Picayune, Louisiana's most influential newspaper, called the American Cyanamid plant 20 miles upriver "the single largest polluting plant in the state." In October, the Louisiana Environmental Action Network, a Baton Rouge-based coalition of citizens groups, designated American Cyanamid its "polluter of the month," criticizing the company for being responsible for a quarter of the 740 million pounds of toxic chemicals discharged into Louisiana's environment in 1988.

How did the newspaper and the environmental group know so much about American Cyanamid's toxic-waste record? They had access to its discharge data as a result of a five-year-old Federal law, the Emergency Planning and Community Right to Know Act, which requires manufacturers to report the total amount of each of some 330 toxic chemicals that have been released into the air, water and land.

The data, reported to the Environmental Protection Agency and to states, are listed in the annual Toxics Release Inventory, a compendium of the country's leading toxic-waste dischargers — and a powerful tool for pressuring factories to reduce pollution.

"It's been very empowering for local people to know who's polluting and to hold these polluters accountable," said Mary Lee Orr, director of the Louisiana Environmental Action Network.

"I don't want to leave the impression that we didn't have these priorities in the past," said James F. Dutcher, a spokesman at the Louisiana American Cyanamid plant. "But there is much more public pressure for us to reduce discharges, and we are reducing them."

But environmentalists say the law has weaknesses. Some dangerous chemicals, among them radioactive substances and the insecticide malathion, are missing from the list. In some cases, a loophole enables manufacturers to circumvent the need to report toxic emissions. Small businesses are exempt from filing a report altogether.

Prompted by Bhopal

The Community Right to Know Act, prompted by the deaths of thousands in a 1984 chemical disaster in Bhopal, India, was approved despite a desperate lobbying campaign by manufacturers, opposition by the White House and public denouncements by the most powerful lawmakers in Congress, who thought the bill would prove to be too much of an onus on industry.

"It was a philosophical leap of faith," said Representative Gerry Sikorski, the Democrat from Minnesota who sponsored the proposal in Congress, "kind of a heartfelt belief that people in communities have an absolute, fundamental right to know what goes into the air their kids breathe, the water they drink and the ground they play on."

Industrial executives and environmental groups agree that the law's most important contribution has been to cause companies to recognize the extent of their discharges and the effect they may have on public health.

The first inventory, published by the E.P.A. in 1989, showed that releases of toxic chemicals totaled billions of pounds in 1987. Some of the nation's largest companies later responded with voluntary programs to reduce such pollution. A.T.&T., for example, said it would stop all emissions of the listed chemicals into the air by the turn of the century.

After the second inventory was made public in 1990, the E.P.A. asked more than 600 companies to cut in half voluntarily emissions of the 17 most dangerous toxic chemicals, including benzene, cyanide, mercury and chromium, by 1995. "If we succeed," said William K. Reilly, the Administrator of the E.P.A., "this program could set the pace for a new cooperative way of addressing the nation's environmental goals."

The law has galvanized small citizens groups. According to a report in Working Notes, a newsletter in Washington that tracks the use of the law, an environmental group in northern California raised concerns last year about the storage and use of chlorine in treating cooling water at a Chevron refinery in Richmond. Chevron stopped using the chemical at that plant last December.

The Raytheon Company pledged in December that it would use safer water-based solutions to clean computer circuit boards after a group in Massachusetts criticized the company's use of chemicals that deplete the ozone layer in the upper atmosphere.

Despite its growing ability to influence environmental struggles throughout the country, the right-to-know law has flaws, said Paul Orum, editor of Working Notes. Any business with nine or fewer employees is exempted from reporting discharges. And an estimate by a congressional research group, the Office of Technology Assessment, said emissions from these sources could total billions of pounds.

In a report released earlier this month, Mr. Orum and three co-authors said that companies have disposed of at least 200 million pounds of toxic chemicals under the recycling exemption while sidestepping reporting requirements. "This loophole is undermining the law because it allows companies to claim waste reductions when, in fact, they aren't reducing pollution at all," Mr. Orum said.

Few states have reacted to the right-to-know law as aggressively as Louisiana, which has some of the worst environmental problems in the country. Four plants by themselves, including American Cyanamid, Shell, and two owned by Freeport McMoRan, discharged 460 million pounds of toxic chemicals in 1988, more than all the plants in Ohio and nearly three times as much as those in New Jersey. The state Department of Environmental Quality called in the three companies and other top toxic-waste dischargers in the state and demanded that they establish plans to reduce emissions.

Despite its growing influence on environmental struggles, the right-to-know law has flaws.

Since its plant opened 20 miles from New Orleans in the early 1950's, American Cyanamid has disposed of most of its toxic wastes by pumping them into a well 3,000 feet underground. Some 75 billion pounds of chemicals have been injected underground. The disposal method was certified as safe in November by the E.P.A., but Louisiana has sought for several years to close the well because of concern that chemicals will contaminate ground water.

Mr. Dutcher, the plant spokesman, said last week that 750 jobs and a nearly $25 million annual payroll could be at stake if the plant was forced to change its disposal practices.

Louisiana, which has a $900 million deficit and an array of economic ills, took note. When American Cyanamid submitted its plan last year to reduce the discharging of toxic waste into the well by 17 percent, state officials deemed the proposal "satisfactory."

The New York Times, March 24, 1991

WALL STREET JOURNAL, January 2, 1991, PAGE ONE

Right to Know

A U.S. Report Spurs Community Action By Revealing Polluters

Northfield, Minn., and Others Are Shocked to Discover Who's Discharging What

But Do the Numbers Mislead?

By RANDOLPH B. SMITH
Staff Reporter of THE WALL STREET JOURNAL

NORTHFIELD, Minn.—Surrounded by clear skies, lush farmland and prime fishing lakes, this historic town is famed as a rural oasis. Its main street, where residents heroically foiled a bank robbery by Jesse James in 1876, attracts thousands of tourists. Its biggest industry is higher education and its tallest smokestack soars from the stately Gothic campus of Carleton College. Northfield's motto: "Cows, Colleges and Contentment."

But over the past 18 months, things have changed so much that an art supply store on the town's main street displayed a five-foot papier mache dead cow with its feet in the air and a sign: "Cows, Colleges and Carcinogens."

What happened? The uproar here was the result of a massive U.S. government data base called the Toxics Release Inventory. The dull-sounding report is raising Cain in communities throughout the U.S. for a simple reason: For the first time, the government is telling local communities who's causing pollution in their neighborhoods—and communities are shocked.

No Telltale Signs

Here, for instance, residents never suspected Sheldahl Inc., a maker of flexible electronic circuits for automobiles and computers. The clean, high-tech plant produces no telltale smoke or odors. "We always thought of Sheldahl as a good neighbor," says Joan Wolf, a poet and editor of a literary magazine. But then a newspaper reported that Sheldahl, the town's largest employer, was polluting the air with nearly 400 tons a year of methylene chloride, a widely used solvent classified as a "probable human carcinogen" although its emission into the air is unregulated. To defuse controversy, Sheldahl immediately volunteered to reduce the emissions 90% by 1993, but the issue has split the community.

In 1989, the federal government began disclosing the staggering quantity of toxic chemicals discharged annually from 20,000 plants across the nation. The Toxics Release Inventory lists plant-by-plant emissions of 320 chemicals believed to cause serious health effects—a total of nearly 5 billion pounds of emissions, mostly legal or simply unregulated. The report tells local citizens what poisons the neighborhood factory is putting out, how much and whether they're polluting the air, water or land. The government also reports what chemicals are being stored and whether any spills have occurred.

Significant Impact

The information is disclosed under the Emergency Planning and Community Right-to-Know Act, adopted in 1986 after the Bhopal disaster in India. "The law empowers citizens to act," says Charles Elkins, a top Environmental Protection Agency official. "You don't have to be a government expert to ask tough questions, such as why a plant pollutes twice as much as competitors in the same industry."

The first two annual reports on industry's toxic emissions have had significant impact. Dozens of Fortune 500 companies have announced voluntary reductions. Monsanto Corp., for example, has already reduced toxic air emissions 39% since 1987 and expects to meet its goal of 90% by 1992. Dow Chemical Co. plans to reduce overall emissions 50% by 1995. Du Pont Co. pledges to cut air emissions 60% by 1993 and cancer-causing components 90% by 2000. Chemical Manufacturers Association spokesman Owen Kean explains: "The public increasingly measures companies by their [emissions] numbers and what they are doing about them."

In California's Silicon Valley testers marched against an In Business Machines Corp. plant 1989 as the state's worst emitte destroying chlorinated flu Right-to-know was a "significar IBM's decision to eliminate (plants by end of 1993, a spoke

A Safer Neighborhood

Residents of Springfield,] the law to find out what dange plants and warehouses adjac homes. Companies had to " they were using dangerous s says James Controvich, S emergency preparedness dir santo, for example, agreed to drums of resins containing flar vents from a public warehou storage at its Springfield plant. panies eliminated extreme ha as cyanide, and others correc ous conditions. "The neighborl nitely safer," says the East Neighborhood Council's Kathle

Right-to-know also gener support for tougher laws. showed that air emissions, ac nearly 40% of all discharges cally uncontrolled," says the Elkins. In October, Congres loophole by mandating strict 189 toxic chemicals under Clean Air Act. In Louisiana resisted even minimal regula know prompted public outra tive action: In 1989, it ad

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Right to Know: Massive Government Report Spurs Local Action by Revealing Polluters for the First Time

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comprehensive law aimed at cutting air emissions in half by 1995.

A Massachusetts advocacy group used the information to show that even the state's computer industries, considered relatively clean, were major polluters. Massachusetts Public Interest Research Group led a campaign that resulted in the nation's strongest toxics use-reduction law, designed to cut chemical wastes 50% by 1997. Right-to-know "created awareness of a real problem that had to be addressed," says John Gould, president of Associated Industries of Massachusetts.

In Massachusetts, Monsanto and Polaroid Corp. have been pilloried for the sheer size of their discharges. Polaroid, for instance, has state permits allowing it to send waste to a sewage treatment plant, which in turn dumps treated waste into Boston Harbor. Although the company insists this is safe, it faces growing public pressure to eliminate waste. Says a Polaroid official: "We could have a very good compliance record and still be accused of being the No. 1 polluter" of Boston Harbor. Polaroid pledged to reduce toxics usage and waste by 10% a year for five years. The company exceeded its goal in 1989, the first year, partly by eliminating mercury in film pack batteries.

Some companies say emissions figures can be misleading. Hoffmann-La Roche Inc.'s Nutley, N.J., pharmaceuticals plant, for example, ranked among the state's top five polluters in reports released in 1989. But environmental groups failed to note that nearly three-quarters of the waste was sent to a sewage treatment plant and converted to harmless carbon dioxide and water, the company says. "You can't just look at emissions totals to measure risks," says Jack Kace, an assistant vice president.

In any event, the numbers don't answer the most basic and troubling questions: Are these emissions a health threat and, if so, to whom? Those were the questions that residents here began asking—and searching for the answers.

A Shocking Report

The flap here started in June 1989, although it took more than the government's report alone to sound the alarm. The Toxics Release Inventory itself is so thick and obscure that it's difficult to compare plants or industries without a computer. Moreover, the report gives no indication of health risks. So environmental groups like the Natural Resources Defense Council pore through the data and release their findings. In 1989, the council listed the nation's biggest emitters of 11 known or probable cancer-causing chemicals—and Sheldahl was ranked 45. That was picked up by wire services and published by the Minneapolis Star-Tribune, which is where the people of Northfield, population 14,000, first saw the news.

They were amazed. Sheldahl had been sending methylene chloride into the air for more than 25 years, but no one outside the plant knew it. Susan Lloyd, a special education teacher, tried to figure out what it meant. She called a dozen public officials to no avail, but she did glean crucial information: The state was about to renew Sheldahl's five-year emissions permit, which imposed no controls on methylene chloride. Citizens could demand a public hearing. She and friends collected 300 signatures on a petition forcing the state to delay the permit.

Sheldahl hoped to blunt the issue. A week after the news broke, the company unveiled a dramatic plan to reduce methylene chloride usage 90% by 1993. Sheldahl would gradually switch to flammable solvents that don't cause cancer. A spokesman, Mark Ester, says the right-to-know report was "a factor, but not the only reason" for proposing the reduction plan. Beverly Brumbaugh, a vice president, says it "was not a driving factor at all. We felt for some time that all emissions needed to be reduced." He points out that Sheldahl had been working to reduce methylene chloride emissions since 1988 and had already installed a $1 million incinerator.

'No Significant Risk'

To allay any fears, Sheldahl organized a plant tour for city officials and residents. Company officials proudly committed to reduce annual emissions from 400 tons to 40 tons in only three years and eliminate them by 2000. They assured residents that methylene chloride posed "no significant risk."

The plant tour backfired. Jacob Freeze, an artist-turned-activist, was furious. He knew the federal government had identified methylene chloride as a probable carcinogen in 1985. He accused the company of keeping the pollution a secret and failing to warn the community. Recalls Ms. Lloyd, the teacher: "The impression was that Sheldahl was trying to cover up."

Sheldahl officials say the company has already spent nearly $5 million to phase out the solvent and can't afford expensive recovery equipment to stop emissions in the interim. James Donaghy, president and chief operating officer, says Sheldahl is moving "as quickly as we know how" without losing customers. "We are trying to balance all our constituencies," he says.

Residents quickly formed an organization, Clean Air Northfield, to investigate the health threat. Faculty at Carleton and St. Olaf College provided technical help.

The town became divided. Homemaker Sueanne Johansen points to the lush expanse of green grass between Sheldahl and the trailer park where she lives. "Our children play out there," she says. "Sheldahl tells us there are 'acceptable levels' of that stuff. Who are they kidding?" Yet her next-door neighbor, Patricia Srsen, has complete faith in Sheldahl, where she has worked 17 years as a data clerk. "It's the college professors blowing things out of proportion," she says. "They think manufacturing is a dirty word."

Uneasy Workers

Mr. Freeze campaigned for zero emissions by picketing, staging a sit-in and even secretly taking pictures on the plant's roof. His threats to "shut down the plant" alienated many of Sheldahl's 650 plant workers, who were already jittery about job security. The workers wanted methylene chloride eliminated, but on a "reasonable" schedule that would protect "jobs and money," says Robin Kruger, a plant steward for the Amalgamated Clothing and Textile Workers Union.

The union also feared that recovering the solvent inside the plant would increase exposure risks and perpetuate its use. After threatening a strike, the union won the right to enforce Sheldahl's 90% use-reduction plan through its labor contract.

Joining forces, the union and activists pressured the state for tougher regulation. As a result, for the first time, the state required an existing plant to reduce cancer risks below a strict threshold. Sheldahl, which has already reduced methylene chloride emissions by nearly two-thirds, would have to cut them 93% by 1995 under the state's proposed emissions permit. If citizens hadn't gotten involved through right-to-know, "there wouldn't be any restrictions in the permit," says Lisa Thorvig, the Minnesota Pollution Control Agency's air compliance chief.

Some Northfield residents aren't satisfied. Clean Air Northfield is lobbying the state to mandate faster reductions and zero emissions in 1995. Sheldahl says that just isn't possible. Further skirmishes are likely before the final decision on the permit later this year.

Whatever the outcome, though, remarkable progress has already been made in reducing methylene chloride risks for residents and workers alike, says Michael Pemrick, a Sheldahl maintenance worker. He says right-to-know provided the catalyst. "Once the community got involved," he says, "there was tremendous pressure on Sheldahl to work much more expediently to reduce the risks."

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