



Chemicals in the Environment

Public Access Information

Contents

*EPA's Green Chemistry
Program*

*Common Sense Initiative,
Computers and Electronics
Sector*

*Environmental Technology
Initiative for Chemicals*

*Pollution Prevention Through
Technology Transfer*

*Environmentally Preferable
Products and the Role of
Federal Consumers*

*The Consumer Labeling
Initiative, Promoting
Household Product Safety*

*Voluntary Efforts in OPPT's
Existing Chemicals and
Chemical Testing Programs*

*Voluntary Use and Exposure
Information Project*

*The International Chemical
Screening Program*

*OPPT Tribal Action
Workgroup*

*Partnerships with State and
Tribal Organizations*

*Community Based
Environmental Protection*

*Voluntary Electronic
Submissions*

*Right-to-Know:
A Mission for All*

*Developing Customer
Service Standards for the
Partnership Programs*



Non-Regulatory Programs in the Office of Pollution Prevention and Toxics (OPPT)

Michelle Price, Co-Chair, *EPA Partnership Programs
Coordinating Committee*

Over the last several years, an important change has been taking place in the Environmental Protection Agency's (EPA) national strategy for protecting health and the environment. In addition to traditional approaches to environmental protection, such as writing and enforcing regulations, EPA is working with small and large businesses, citizen groups, and state and local institutions to develop cooperative nonregulatory programs that benefit all parties involved. This nonregulatory approach fosters innovation in preventing pollution, reduces costs and increases the efficiency of Agency operations.

This issue of *Chemicals in the Environment* describes nonregulatory programs within OPPT and provides access to the information products and services associated with these programs. EPA's Office of

Pollution Prevention and Toxics (OPPT) administers programs on toxic chemicals and spearheads the Agency's effort to promote pollution prevention. In partnership programs such as the Design for the Environment Program, OPPT is encouraging businesses to prevent pollution by incorporating environmental considerations into the design and redesign of products and processes. Through the 33/50 Program, OPPT is challenging industries to reduce toxic emissions of 17 target chemicals. Through other programs, OPPT is working with industry and other countries to receive and publish information on chemicals in a timely and cost effective manner. Though the end results of these programs differ, together they represent a new way of doing business in accomplishing OPPT's and the private sector's goals to protect human health and the

(continued on page 2)

Non-Regulatory Programs in OPPT *(continued)*

environment. In addition to the OPPT information products and services described in this issue, there is a document available which describes most of EPA's voluntary pollution prevention programs. This document is entitled, "Partnerships In Preventing Pollution: A Catalogue of the Agency's Partnership Programs," and is available through the Pollution Prevention Information Clearinghouse at (202) 260-1023. The document was produced by the Partnership Programs Coordinating

Committee (PPCC), the agency-wide workgroup charged with coordinating the Agency's pollution prevention partnership programs. The mission of the PPCC is to increase public awareness of the Agency's voluntary programs, and to foster coordination among, and continuing improvements in, all of our partnership programs. For information about the PPCC, contact Michelle Price of OPPT at (202) 260-3372.

EPA's Green Chemistry Program

Paul Anastas and Tracy Williamson, *Economics, Exposure and Technology Division*

Green Chemistry is the use of chemistry for pollution prevention. More specifically, green chemistry is the design of chemical products and processes that are more environmentally benign. Green chemistry encompasses all aspects and types of chemical processes that reduce negative impacts to human health and the environment relative to the current state of the art. By reducing or eliminating the use or generation of toxic substances associated with a particular synthesis or process, chemists can greatly reduce risk to human health and the environment. This new approach to pollution prevention through the environmentally-conscious design of chemical products and processes is the central focus of the Green Chemistry Program, an initiative under the EPA Design for the Environment Program.

History

Shortly after the passage of the Pollution Prevention Act of 1990, the Office of Pollution Prevention and Toxics (OPPT) began to explore the idea of developing new or improving existing chemical products and processes to make them less hazardous to human health and the environment. In 1992, OPPT launched a model research grants program called "Alternative

Synthetic Pathways for Pollution Prevention". This program provided for the first time grants for research projects that include pollution prevention in the synthesis of chemicals. Since that time, the Green Chemistry Program has built many collaborations with other federal agencies, industry, and academia to promote the use of chemistry for pollution prevention through completely voluntary, non-regulatory partnerships.

Goals

The goal of the Green Chemistry Program is to foster the use of innovative chemical methods that accomplish pollution prevention in both a scientifically-sound and cost-effective manner. The Green Chemistry Program recognizes and promotes chemical methods that reduce or eliminate the use or generation of toxic substances during the design, manufacture, and use of chemical products and processes and that have broad application in industry. The program supports research in the area of environmentally benign chemistry, promotes partnerships with industry in developing green chemistry technologies, and works with other federal agencies in building green chemistry principles into their operations.

Current Green Chemistry Projects

The Green Chemistry Challenge. The Green Chemistry Challenge was announced on March 16, 1995, by President Clinton as part of the Reinventing Environmental Regulations Initiative to "promote pollution prevention and industrial ecology through a new EPA Design for the Environment partnership with the chemical industry". Design for the Environment partnerships with industry can encourage changes that both promote economic development and benefit industry by helping find cost-effective ways to prevent pollution. Green chemistry is both a fundamental and cost-effective approach to pollution prevention.

Through awards and grants programs, the Green Chemistry Challenge is recognizing and promoting the research, development, and implementation of innovative green chemistry approaches. On October 30, 1995, EPA Administrator Carol Browner announced the Green Chemistry Challenge Awards Program as an opportunity for individuals, groups, and organizations "to compete for Presidential awards in recognition of fundamental breakthroughs in cleaner, cheaper, smarter chemistry." The Green Chemistry Challenge Awards Program provides national recognition for chemistry that incorporates the principles of green chemistry into chemical design, manufacture, and use.

SMART Review Program Concurrent to its regulatory review of new chemical substances for health and environmental risk, OPPT has begun a non-regulatory initiative for assessing the pollution potential associated not just with new chemicals, but also with their manufacture. The objective of the assessment is to identify the source and type of chemicals of concern associated with new chemicals, their manufacture, and their use. The assessment then focuses on how new chemicals or their manufacture can be improved through the implementation of one or more green chemical approaches. All green chemical methods

identified by OPPT as potential solutions to reducing the concerns associated with a new chemical or its manufacture are suggested to companies for their voluntary consideration.

Industry/University/Government Partnerships.

Fundamental research in green chemistry is essential in providing industry with the chemically-viable tools and methods necessary to develop products and processes that are more environmentally benign. Industry input in fundamental green chemical research is important to ensure that the tools and methods developed are also economically viable. To accomplish this goal, OPPT supports several industry/university/government consortia including the Emission Reduction Research Center at the New Jersey Institute of Technology, the Toxics Use Reduction Institute at the University of Massachusetts, and the Center for Process Analytical Chemistry at the University of Washington.

Interagency Partnerships. OPPT has established several partnerships with other agencies that are also promoting pollution prevention through green chemistry. In 1992, the National Science Foundation and EPA signed a Memorandum of Understanding to work cooperatively in supporting basic green chemical research. To date, several millions of dollars of support in the form of grants have been made available for green chemical research in the area of "Environmentally Benign Chemical Synthesis and Processing" and most recently, in the area of "Technology for a Sustainable Development." In addition, OPPT has established a partnership with the Los Alamos National Laboratory also in support of fundamental green chemical research. Los Alamos is currently researching and developing alternative solvents for pollution prevention.



EPA's Green Chemistry Program (continued)**Green Chemistry Curriculum Development.**

One factor that can greatly speed the incorporation of pollution prevention into industrial manufacturing processes is addressing pollution prevention issues in academic chemistry curricula as well as in professional training courses. In order for pollution prevention to become a standard in industry, it is imperative that chemists be educated about pollution prevention concepts during both their academic and professional training. To accomplish this goal, OPPT supports a variety of educational efforts that include the development

of materials and courses to assist in the training of professional chemists in industry and education of students in academia. Consequently, the chemical industry is discovering that when their professional chemists are knowledgeable about pollution prevention concepts, they are able to identify, develop, and implement effective pollution prevention technologies.

For more information, contact Paul T. Anastas at 202-260-2659 or anastas.paul@epamail.epa.gov.

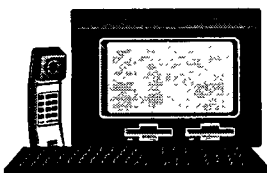
**EPA's Common Sense Initiative,
Computers and Electronics Sector**

Dave Jones, *EPA Region 9* and Esther Tepper, *Chemical Control Division*

The Common Sense Initiative (CSI) is a major new EPA initiative designed to find innovative approaches to improve environmental protection. The Computers and Electronics Subcommittee, one of six CSI industrial sectors, is charged with finding cleaner, cheaper, and smarter approaches to environmental protection in the computers and electronics industry. The subcommittee will examine a wide range of topics, including regulations, pollution prevention, reporting, compliance, permitting, and environmental technology.

The subcommittee consists of 26 members appointed by the EPA Administrator to incorporate the viewpoints of industry, government, environmental, environmental justice, academic, and labor leaders. The subcommittee co-leads are the Assistant Administrator for Prevention, Pesticides, and

Toxic Substances and the Regional Administrators from EPA Regions one and nine.

**Subcommittee Issues and Workgroups**

During the first two meetings of the Computers and Electronics Sector Subcommittee in March and April of 1995, members identified, clarified, and discussed problems or issues with the existing environmental regulatory or management structure. Following these discussions, subcommittee members established three workgroups to address selected issues and to explore opportunities for resolving them through common sense, innovation, and flexibility, with the overarching aim of achieving a cleaner environment at less cost. The workgroups are focusing on the following three areas:

1) Identifying ways to overcome barriers to pollution prevention and recycling in the computers and electronics industry-

► **Address issues associated with managing end-of-life (EOL) electronic equipment.**

Activities include developing household collection pilots; investigating regulatory

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This resource is also accessible through the World Wide Web at <http://www.epa.gov>. It is located under EPA Offices, Regions, and Laboratories/Office of Prevention, Pesticides and Toxics (submenu: Toxic Substances)/Chemicals in the Environment: Public Access Information.

(Note that the location may change in the Summer of 1996 due to changes in the Web Site)

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barriers to cathode ray tube (CRT) recycling; holding a conference on managing EOL electronic equipment; and, in conjunction with the conference, establishing an independent roundtable to serve as an information clearinghouse on and a forum for addressing issues involving management of EOL electronic equipment.

- **Investigate regulatory barriers to pollution prevention and recycling in the manufacturing process.** Analyze possible regulatory barriers to use of closed-loop, zero-discharge wastewater recycling processes in the computers and electronics industry.

2) Developing flexible, performance-based alternative approaches for environmental

management in the computers and electronics industry-

- **Develop a more flexible system of environmental protection for facilities that demonstrate superior performance.** Describe the vision, goals, objectives, and conceptual components of a facility-based system of environmental protection that provides more flexibility than the current "command and control" regulatory structure.
- **Initiate a CSI sector-based pilot program to test components of the alternative system:** Solicit proposals from computers and electronics facilities to pilot test different components of the alternative system.

3) Developing streamlined and easily accessible reporting and information systems that meet the data needs of industry, government, and communities-

- **Consolidate and integrate the reporting requirements that facilities must meet to assure that they are prepared to respond to emergencies such as chemical spills or releases.** Pilot a comprehensive, electronically linked, simplified, and easily accessible emergency response system that meets the needs of industry, government, and the community.
- **Develop a Combined Uniform Report for the Environment (CURE):** Compile a summary of reporting requirements for the Computers and Electronics Sector. Work with ongoing efforts by the state of Texas to develop a streamlined, relevant, and easily accessible reporting information access system that meets the needs of industry, government, and communities.

For more information on the Computers and Electronics Sector of the Common Sense Initiative, contact Regina Bushong at (202) 260-3797.

Environmental Technology Initiative for Chemicals: Reducing Risk and the Barriers to Innovation

David Di Fiore, *Chemical Control Division*

For many years frustration has plagued both the manufacturers of new chemicals and the risk management gatekeepers in EPA's New Chemicals Program (NCP).

Manufacturers are frustrated because EPA regulates "new" chemicals (those not yet in manufacture in the U.S.) when similar substances, commonly referred to as "existing chemicals" are not controlled. Existing chemicals are chemicals that were in commerce when the Toxic Substances Control Act came into being and, therefore, were not subject to new chemical review. Manufacturers have labeled this situation "new chemical bias" and claim that it represents a significant, sometimes insurmountable, barrier to the commercialization of new chemicals.

On the flip side, the EPA risk managers in the New Chemicals Program are frustrated because chemical manufacturers do not apply the same controls on existing chemicals as are required for new chemicals, even though the existing chemical typically forms the toxicological basis for the Agency's risk findings. This dissimilarity in treatment may even occur when the new and existing chemicals are manufactured in the same plant.

The frustrations of manufacturers and risk managers converge in instances where a new chemical is safer than similar existing chemicals--the result of an innovation in chemistry or technology-- and yet still presents risks that should be controlled. The NCP gatekeepers do not want to erect a barrier to the introduction of a safer new chemical and at the same time must ensure that adequate controls are in place to protect human health and the environment.

Recognizing these frustrations, the New Chemicals Program has launched a project designed to reduce risk and the barriers to the development, introduction and use of safer chemicals and technologies. Known as the Environmental Technology Initiative (ETI) for Chemicals, this project has the following goals:

- Promote risk reduction within industry sectors by encouraging innovation--in chemistry, production technologies, handling/ disposal practices--for all chemicals, both new and existing;
- Offer industry the opportunity to work with EPA to explore new, non-traditional ways to manage risks;
- Refine EPA's understanding of the toxicity and risks associated with selected chemicals and use categories; and
- Develop an information management infrastructure to enhance EPA's ability to identify risk reduction opportunities.

The ETI for Chemicals should help relieve industry and Agency frustrations through risk management outcomes like these:

- Manufacturers agree to change the physical nature of a class of chemicals from a powder or other respirable form (something that can be inhaled) to a non-respirable one (e.g., pellet or slurry), thereby eliminating the potential for inhalation exposure and the need for traditional regulatory controls.

(continued on page 12)

Pollution Prevention Through Technology Transfer

Bill Waugh, *Chemical Screening and Risk Assessment Division*

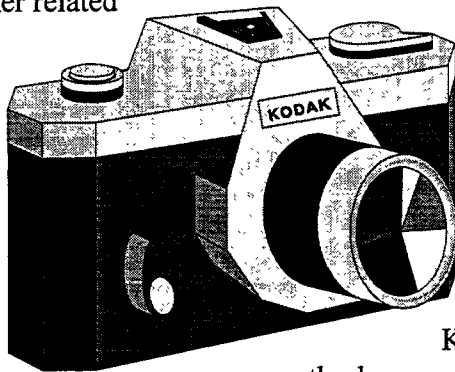
The Office of Pollution Prevention and Toxics (OPPT) has developed a variety of analytical methods to support the evaluation of potential risks and benefits of chemicals. These methods include computer modeling techniques, quantitative structure activity relationships, automated exposure assessment methods, and other related methods.

Scientists evaluating the risks of chemicals often lack important data necessary to characterize potential risks of chemical substances. The methods developed by EPA, together with tools developed by others, can be used to calculate or estimate important chemical, physical, or biological characteristics of a chemical, based on the chemical's structure. These methods provide critical information that would otherwise be unavailable to scientists evaluating the health and environmental risks of new or existing chemical substances.

The methods help scientists understand how chemicals move through the environment and how people or the environment might be exposed to such chemicals. The methods help scientists predict the potential of a chemical to cause certain health and/or environmental effects (i.e. toxicity to the human nervous system, toxicity to aquatic organisms). Other methods help determine if people could be exposed to a chemical of concern through drinking water or through the air we breathe, and the magnitude of such exposure. This information helps scientists estimate the potential for and magnitude of human or environmental risks posed by individual chemicals (if any). The methods assist in the comparison of risks between chemicals and help identify safer

substitutes for use in commercial and/or consumer products. The methods also help identify chemicals of concern for laboratory testing and for further scientific analyses.

OPPT believes these analytical methods can be highly valuable to the private sector, state and regional governments, and environmental organizations in day-to-day operations. In 1995 and 1996 OPPT and Eastman Kodak Company worked together on a pilot project to evaluate the utility of our methods to Kodak operations.



Kodak found EPA's analytical methods very useful, enhancing processes already in place to guide the company's research and development efforts. EPA's methods helped Kodak to anticipate problematic waste streams from new synthetic pathways (procedures for making chemicals) and to focus resources on chemicals least likely to result in potential health and environmental risk. Kodak's comments on the collaboration include the following statements:

"At the outset, we realized that participation in the technical exchange program could help the Health and Environment Laboratories advance an important goal: to provide product development scientists with an early assessment of the potential health and environmental effects from chemicals being considered for use in new product designs or reformulations."

"...these methods, if applied early enough in a chemical or product development cycle, can have an

(continued on page 12)

Environmentally Preferable Products and the Role of Federal Consumers

Eun-Sook Goidel, *Pollution Prevention Division*

The concept of "green" products and services certainly is a familiar one to most consumers. Many have seen products on grocery shelves touting the products' environmental virtues. The prevalence of environmental claims on the products is both an indication of increased awareness on the part of consumers about the integral role they can play in improving the environment through their purchasing patterns and an indication of manufacturers' recognition that differentiating their products on the basis of environmental attributes can serve as a competitive advantage.

By demanding certain products, consumers can send a clear signal to the manufacturers about their preferences for those products and services that pose fewer burdens on the environment. By leveraging their purchasing power, consumers are voting with their pocketbooks, directly affecting manufacturers' bottom lines. "Consumers" include anyone in the private or public sector that buys goods and services, including individuals, institutions (e.g., universities, hospitals, all levels of government) and companies.

However, despite the heightened consumer awareness and interest expressed through various consumer polls, the market for "green" products remains a niche market. The potential for improving the environment through demand-driven policies has until now been little used.

As the single largest consumer of goods and services, expending over \$200 billion annually, the Federal government can play a unique role in leveraging and jump starting the market for "green" products. The fact that paper with recovered materials content has become the norm is an example of how purchases of such

goods by the Federal government made it more widely acceptable and available. This was the rationale behind the Executive Order on Federal Acquisition, Recycling and Waste Prevention (E.O. 1287) signed by President Clinton in October, 1993. This Executive Order requires Executive agencies to give preference, among other things, to the purchase of products and services which are "environmentally preferable." By "environmentally preferable" the Executive Order means those "products or services that have a lesser or reduced effect on human health and the environment when compared with competing products or services that serve the same purpose". The U.S. Environmental Protection Agency (US EPA) was tasked with giving further meaning to this definition.

Last fall, EPA Office of Pollution Prevention and Toxics published a *Proposed Guidance on the Acquisition of Environmentally Preferable Products and Services* (60 F.R. 50722, September 29, 1995). This represented a culmination of lengthy discussions with key stakeholders, including major Federal purchasing agencies (such as the Department of Defense, the General Services Administration, Department of Energy, etc.), manufacturers, trade associations, and environmental organizations about what "environmental preferability" means within the context of **Federal purchasing**. The Federal government is like any other consumer in the sense that it buys many products that are similar to those individual consumers buy (but in much larger quantities), such as cleaning products, food goods, automobiles, etc., there are significant differences as well, both in terms of what and how it buys. The most important difference perhaps is that individual consumers in the private sector are not governed by the complex

set of laws and regulations (put in place to ensure wise use of tax payers' dollars) that the Federal government must follow when making purchases. The *Guidance* was developed with these similarities and differences in mind.

EPA's *Guidance* serves as a broad framework within which Federal agencies can initiate efforts to make more environmentally preferable purchasing decisions. It lays out a series of principles that are intended to guide Federal purchasers as they consider environmental preferability in their acquisition decisions. These guiding principles include:

- ▶ Consideration of environmental preferability should begin early in the acquisition process and be rooted in the ethic of pollution prevention;
- ▶ A product or service's environmental preferability is a function of multiple attributes;
- ▶ Environmental preferability should reflect life-cycle considerations of products and services to the extent feasible;
- ▶ Environmental preferability should be tailored to local conditions where appropriate.

Through **voluntary pilot projects**, EPA, in cooperation with other Executive agencies, is applying these principles to specific acquisitions and developing guidance for certain product categories. Currently underway are pilot projects on cleaners and construction. Other pilots are in the planning stages. While the *Guidance* is aimed at public and private policy-makers, the product guidances are intended to be more detailed, practical and "user friendly" for use by procurement and contracting officers. These pilot projects will serve as important testing grounds for how the Federal government can take a leadership role in protecting the environment through the decisions it makes about the products and services it

purchases.

The Executive Order and OPPT's program discussed in this article are geared towards changing what and how the Federal government buys the products and services it uses. However, given the changes taking place in the Federal acquisition process whereby more and more Federal consumers will be allowed to buy directly off the shelf, the line between private and public sector market place will become increasingly blurred. Recognizing the potential spill-over effect into the private market place, manufacturers and their trade associations have been particularly interested in the issues associated with environmental preferability. And the discussions begun during the development of the *Guidance* will likely continue. This is desirable given the complex and dynamic nature of the issues associated with environmental preferability. For example, as technology and scientific knowledge advances, the definition of what is environmentally preferable will have to evolve to reflect these changes as well. As these discussions continue, EPA's responsibility is to ensure that key stakeholders are engaged and that the debate furthers the goal of achieving environmental improvement using consumers' purchasing power.

To obtain a brochure and guidance document on the Environmentally Preferable Products Program, contact EPA's Pollution Prevention Information Clearinghouse at (202) 260-1023. Additional information products will be made available through the clearinghouse in the future.



The Consumer Labeling Initiative, Promoting Household Product Safety

Mary Dominiak, *Chemical Control Division*

On March 22, 1996, EPA's Office of Prevention, Pesticides, and Toxic Substances (OPPTS) announced the start of the Consumer Labeling Initiative (CLI), a voluntary program designed to find ways to improve the labels on household chemical products by making essential health, safe use, and environmental information easier for consumers to find, understand, and use. Between March and September 1996, EPA will conduct research cooperatively with other Federal and State agencies, with industry partners, and with other interested groups to learn directly from consumers what problems or dissatisfactions they have with current labels, and how those labels might be improved from the consumer's perspective. EPA will use this research to form recommendations to the EPA Administrator for future action to implement label changes.



The CLI is a pilot project focusing on three principal product categories: indoor household pesticides, particularly insecticides; outdoor lawn and garden pesticides; and household hard surface cleaners, including disinfectant and antimicrobial (for example, mold and mildew remover) products. EPA currently regulates the labeling on pesticide products, including disinfectants. EPA's pesticide labeling regulations were originally developed for professional applicators working in agricultural settings, however, and do not distinguish between agricultural products and ones intended for consumer home and garden use. This means that the labels often contain technical information and language that is not easily understood.

A number of industry partners are working together with EPA and the Task Force in designing the project research and formulating possible solutions. These partners include the

Clorox Company, Procter & Gamble, Reckitt & Coleman (the manufacturers of Lysol® products), SC Johnson, the Solaris Group (a unit of Monsanto Corporation which owns the Ortho®, Round-Up®, and Green Sweep® product lines), the Chemical Specialties Manufacturers Association, the Chemical Producers and Distributors Association, and Responsible Industry for a Sound Environment. In addition to EPA, the Task Force includes representatives from the Consumer Product Safety Commission (CPSC), the Food and Drug Administration (FDA), the Federal Trade Commission (FTC), the Vermont Agency of Natural Resources, the California Office of Environmental Health and Hazard Assessment, the American Association of Pest Control Officials, and the Forum on State and Tribal Toxics Actions (see page 17).

The research this summer will include one-on-one interviews with consumers in six cities around the country. Individuals and groups have also been



invited to submit comments and ideas, and to participate in the research process. In

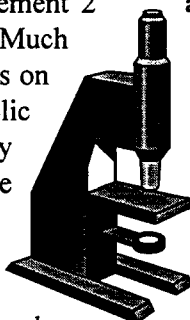
September, the EPA staff, together with the Task Force members and the industry partners, will present a report to the EPA Administrator summarizing what has been learned, and EPA staff will make recommendations for additional action to implement label improvement ideas.

If you would like to submit comments or ideas, you can send them to: OPPT Document Control Officer (7407), AR-139 - Consumer Labeling Initiative, Environmental Protection Agency, 401 M Street, SW, Washington, DC 20460. All comments and all reports prepared during the project will be placed in this record and will be available for public review. If you have questions on the project, you can call Mary F. Dominiak, CLI Task Force Co-Chair, at (202) 260-3068.

Voluntary Efforts in OPPT's Existing Chemicals and Chemical Testing Programs

Deborah Williams & Dave Williams, *Chemical Control Division*

Over the past several years, OPPT has increased its efforts to use non-regulatory and voluntary approaches as tools of first choice in its Risk Management 2 (RM2) and Chemical Testing Programs. Much of the success realized in this area builds on the chemical industry's own public commitment to proactive, voluntary product stewardship programs such as the Chemical Manufacturers Association's "Responsible Care" program. These types of voluntary industry programs represent a fundamentally different approach to corporate responsibility for health and environmental matters.



partnerships between local, state and federal governments, promoting safer chemical substitutes, developing product stewardship agreements, developing information products, disseminating information to customers, conducting outreach activities and providing local communities with the information and tools they need to become better environmental stewards - have become very effective risk management tools for OPPT.

Chemical Testing

OPPT's Chemical Testing Program pursues opportunities for voluntary testing agreements to fill data needs before it uses its testing authority under TSCA Section 4. This benefits EPA, because the resources required to develop voluntary product stewardship-related agreements are far fewer than those needed to issue a test rule under TSCA Section 4. Voluntary testing agreements afford greater flexibility than the regulatory process. Benefits for the industry participants include the opportunity to negotiate the appropriate testing and how it will be conducted. Examples of voluntary agreements with industry range in complexity from simple testing agreements to comprehensive programs that encompass testing efforts and complementary product stewardship programs. These product stewardship programs may include pollution prevention and other types of risk reduction activities. In some cases, a product stewardship program agreement is captured by way of a formal "Memorandum of Understanding" (MOU) between EPA and one or more chemical companies.

Risk Management 2

Based on an initial screening in Risk Management 1 (RM1, another component of the Existing Chemicals Program), some chemicals are targeted for further assessment. In OPPT's RM2 Program, chemicals are further analyzed and investigated, and options are developed to address any concerns identified. After RM2 analyses, if risk management is appropriate, OPPT implements one or more options designed to reduce or eliminate risks. These options may be regulatory, non-regulatory or a combination of both. Whether or not a voluntary approach is pursued depends on several factors: the relative willingness of an industry to engage in a voluntary activity; the ability to leverage other groups to promote an option or to assume some of the burden for generating or disseminating information, and the status of other EPA or government activities that could affect a risk management decision.

In recent years, the RM2 Program has moved away from regulatory approaches that relied on Section 6 of TSCA as its primary tool of choice to control chemical exposure. Instead, creative uses of non-traditional tools - such as establishing

Product Stewardship

Product stewardship is a risk management tool used by both the Testing and RM2 Programs. The voluntary submission of periodic (generally

annual) reports to EPA is a key feature of many of the product stewardship program agreements OPPT has entered to date. The initial reports provide a baseline -- information which serves as a yardstick for assessing future activities. Subsequent reports contain a description of the activities undertaken and the improvements realized under the company's product stewardship efforts. Another important feature of some of the voluntary agreements negotiated to date is an industry commitment to design and implement their product stewardship programs in a manner that helps ensure the protection of health and the environment for all people, regardless of race, ethnic background, or socioeconomic status. OPPT has commended several chemical companies for their strong leadership, foresight,

and commitment to develop and implement voluntary product stewardship programs. OPPT's Existing Chemicals and Chemical Testing Programs will continue to use voluntary approaches as well as other innovative chemical testing and risk management approaches as OPPT strives to create meaningful partnerships with industry and others (e.g., communities, local governments, etc.) to pursue efforts to protect human health and the environment.

For information on EPA's risk assessment and risk management process on chemicals, see the Winter 1995/96 Issue of *Chemicals in the Environment*. For more information on the Existing Chemicals Voluntary Programs, contact Deborah Williams at (202) 260-1734 (Internet: williams.deborah@epamail.epa.gov).

Environmental Technology Initiative for Chemicals (*continued*)

- Rather than confirm a likely human health effect through additional toxicity testing, EPA and an industry consortium agree to allocate resources differently--either for research and development on innovative control technologies to reduce occupational exposures, or to create a fund to expand the use of these technologies.
 - A company develops a safer way to synthesize a class of chemicals,
- reducing toxicity vis-a-vis existing products, and enhances its product stewardship program to ensure safe and effective use; in return, EPA eliminates a potential barrier to commercialization of the product line by adopting a voluntary approach to risk management.

For more information, contact either Mary Cushmac (202-260-4443) or David Di Fiore (202-260-3374), chairs of the ETI for Chemicals work group.

Pollution Prevention Through Technology Transfer (*continued*)

immediate and positive impact on programs to reduce the potential hazards from commercial manufacturing operations."

"The methodologies supplied by the Agency allowed those chemicals with the greatest potential hazard to be eliminated from further consideration at a point in time when the economic impact of the decision was minimal. By applying the methods early in the development cycle, we were able to avoid unnecessary expenditures on product formulations for which appropriate alternatives were available or could be

developed." OPPT is evaluating how best to share these methodologies with other companies and organizations. OPPT is considering ways to improve the utility of the methodologies and working with companies and other organizations to more broadly disseminate the methods.

For more information on the technology transfer, call Bill Waugh (202) 260-3489. For information on Chemical structure activity relationships, see the Winter 1995/96 issue of *Chemicals in the Environment*, page 7.

Voluntary Use and Exposure Information Project

Greg Macek, *Economics, Exposure and Technology Division*

The Voluntary Use and Exposure Information project is a program developed jointly by EPA and industry.



It provides a method for chemical manufacturers to voluntarily send use and exposure information to OPPT for the chemicals entering EPA's Existing Chemicals risk management screening assessment (RM1).

The program started in the fall of 1992 when the Chemical Manufacturers Association (CMA) and the Synthetic Organic Chemical Manufacturers Association (SOCMA) asked OPPT what the chemical industry could do to help strengthen OPPT's Existing Chemicals Program. OPPT explained that accurate use and exposure information was not readily available and that better information in this area was a key need. A joint industry/OPPT workgroup was formed to address this need and work on this program. More recently, other significant trade group stakeholders including the American Petroleum Institute (API) and the Chemical Specialties Manufacturers Association (CSMA) have participated in the further development of this project.

In this program, manufacturers and importers voluntarily report the following information for chemicals that is needed to assess chemical exposures:

- ▶ production volume
- ▶ site location
- ▶ % of production volume for a given use
- ▶ environmental releases that occur to different media
- ▶ worker exposure - (e.g. number of workers by job category, personal protective equipment worn, monitoring data)

- ▶ industrial and consumer uses

Chemicals selected for this project so far have been of concern because of the potential toxicity. For example, some are believed to be persistent in the environment, and some have been potential carcinogens.

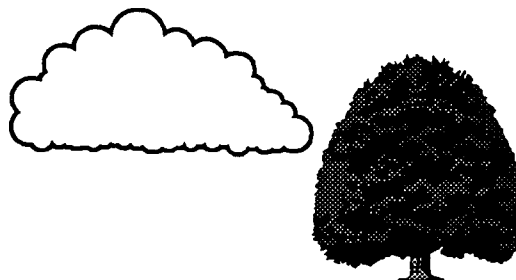
Upon receipt of data on use and exposure from manufacturers and importers, EPA prepares a screening level exposure assessment. Submitters have an opportunity to comment on the assessments EPA develops. During EPA's review of a chemical, submitters have further opportunity to provide input.

Through this program EPA gets exposure data faster and avoids resorting to contentious regulation. Chemical manufacturers become aware of chemicals EPA is concerned about and can help ensure accurate assessments of chemical risks.

Use of this program for transferring data to EPA has been successfully tested in a pilot and two rounds of information gathering covering 45 chemicals. EPA received enough information to proceed with the development of 17 use and exposure profiles covering 22 of the chemicals. Fifteen chemicals have been selected for the next round of data collection which began in May 1996.

For more information, contact Greg Macek at (202) 260-9597

Internet: macek.greg@epamail.epa.gov.



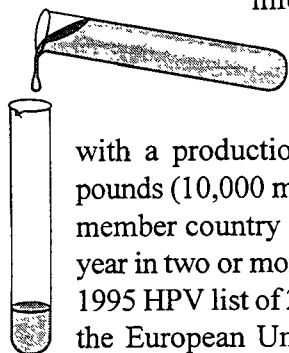
The International Chemical Screening Program

Ralph Northrop, *Chemical Control Division*



Since the 1970s, member countries of the Organization for Economic Cooperation and Development (OECD) have been working together to address issues on chemical safety. One of the major problems is that of evaluating the tens of thousands of chemicals already in commerce known as "existing chemicals." OECD members decided to focus on the chemicals having the highest worldwide production, and to collect for each one a standard minimum set of data. OECD would then use the data to screen these "high-production-volume" (HPV) chemicals for their potential risks to man and the environment. By 1990, the United States and 13 other OECD member countries were ready to start a voluntary international testing program to develop the data set for the first group of chemicals.

This basic level of testing and other information devised by the OECD is called the Screening Information Data Set, or SIDS. The SIDS includes information on the identity of the chemical, its physical and chemical properties, uses, sources and extent of exposure, environmental fate (for example, whether it degrades quickly and how it might be distributed throughout the environment), and limited toxicity data for humans and the environment. The SIDS is not intended to describe the chemical thoroughly, but to provide enough information to assign a priority for further study.



HPV chemicals are those with a production volume of 22 million pounds (10,000 metric tons) per year in one member country or 2.2 million pounds per year in two or more member countries. The 1995 HPV list of 2,550 chemicals combines the European Union's (EU) HPV list and the updated HPV lists from non-EU OECD member countries like the United States and

Japan.

Once sponsor countries have selected chemicals from the HPV List, they collect data; prepare SIDS Dossiers (standardized summaries of the available information) and Testing Plans (for chemicals lacking some of the SIDS data); circulate SIDS Dossiers and Testing Plans to other countries for review and approval; review and comment on the documents prepared by other countries; carry out SIDS testing and add the new data to the Dossier; and prepare a SIDS Initial Assessment Report (SIAR). OECD review of SIARs (at SIDS Initial Assessment Meetings, or SIAMs) determines whether chemicals have a low priority for further work or whether further (Post-SIDS) testing or analysis of more detailed exposure information is needed.

The SIDS program benefits many parties in the following ways:

- Directs international efforts and resources toward the chemicals of greatest potential risk;
- Improves environmental protection and human health as existing chemicals are investigated more effectively;
- Reduces duplication of testing by chemical companies to fulfill various national and regional requirements;
- Reduces national financial costs of testing as a result of increased international cooperation in testing;
- Reduces use of animals in testing;
- Increases mutual understanding of national procedures for assessing chemicals, with eventual agreement on methods;
- Makes widely available chemical data and initial assessments;
- Provides greater flexibility for companies that might otherwise be subject to government-

imposed testing;

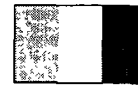
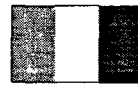
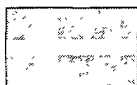
-Increases information resources for countries having less sophisticated chemical safety programs.

Nearly 300 chemicals are undergoing data collection, testing and assessment in the OECD SIDS framework; each year, about 50 more chemicals enter the process. So far around 500 tests have been undertaken under the auspices of the 18 countries now taking part. Testing is done by standard methods in order to ensure that the results are mutually acceptable among Member countries. The results of the SIDS program are available to all countries through the International Registry of Potentially Toxic Chemicals (IRPTC) and the International Program for Chemical Safety (IPCS).

EPA and OPPT have played a major leadership role in developing and implementing the OECD

SIDS program, initially meeting with various U.S. federal agencies, the chemical industry, and environmental groups to sort out differences and develop support for the effort. Voluntary cooperation of the industry and its umbrella organizations is critical to the success of the program. As the official U.S. SIDS Contact Point, OPPT coordinates U.S. contributions to the program. OPPT now incorporates OECD SIDS activities and products into its Existing Chemical Program, reviews all SIDS assessments as part of its own Risk Management process, and adds SIDS chemicals to its Master Testing List.

If you would like more information about the SIDS program, please contact Karen Boswell, Chemical Control Division (7405), OPPT, Environmental Protection Agency, 401 M Street, S.W., Washington, D.C. 20460; telephone, (202) 260-1635; fax, (202) 260-8850; Internet: boswell.karen@epamail.epa.gov.



Screening Information on the Internet

The public can access reports developed under the Screening Information Data Sets (SIDS) Program, Voluntary Use and Exposure Information Project (VUEIP) and EPA risk management process through the following information access points:

EPA's World Wide Web Server:

<http://www.epa.gov>

click on-

*EPA Offices, Regions and Laboratories/
Office of Prevention Pesticides and Toxic Substances/
International Screening Information Data Sets*

Toxic Substances Control Act Assistance Information Service:

(202) 554-1404

OPPT Tribal Action Workgroup

Kathy Hogan, Tribal Coordinator, *Office of Pollution Prevention and Toxics*

The Office of Pollution Prevention and Toxics (OPPT) Tribal Action Workgroup is initiating activity to improve OPPT's understanding of Tribal environmental issues so that we can better relate OPPT activity to Tribal concerns. A related activity of the Workgroup is to improve OPPT's communication with Tribes. In coordination with our Regional counterparts, we are planning OPPT's first direct mailing to Tribes about the work, products, and services of OPPT. We will use the mailing as an opportunity to underscore the connection between the work of OPPT and its relationship to Tribal EPA Agreements (TEAs). Supporting these agreements is a priority initiative of the EPA's American Indian Environmental Office. TEAs provide the primary vehicle for Tribes to communicate their self-determined list of environmental priorities to the Agency.

The basis of all OPPT Tribal Action Workgroup activity is the Agency's Indian Policy, as announced in 1984, and then reconfirmed with an additional implementation Action Plan by the Administrator in 1994. The Workgroup has placed these and other basic Tribal documents on the OPPT's internal Electronic Bulletin Board as a tool to advance staff training in Tribal matters. The active support of staff training and improved communication with Tribes are two of the important goals set forth in the Administrator's 1994 Action Plan.

The Agency works to help build Tribal capacity and, wherever possible, supports the exercise of Tribal sovereignty and self-determination. Through participation in biweekly teleconferences with the Agency's National Indian Workgroup, and the National Indian Law Workgroup, OPPT Tribal Action Workgroup members are kept informed of current Tribal issues and report any essential information to management for response. Workgroup members also participate in various activities with the Forum on State and Tribal Toxics Action's State and Tribal Enhancement

Program (see page 17).

As a separate initiative, the Workgroup Chair has collected virtually all existing Tribal Constitutions in a project to assist Tribes in building an important information resource capacity. Tribal Constitutions, along with treaties, agreements, codes, and ordinances, define the legal parameters of Tribal sovereignty. Currently, many Tribes are revising and strengthening their Constitutions. Creating an electronic version of some 500+ Constitutions and using a state-of-the-art search engine will help Tribes conduct research in revising their Constitutions. The collection will serve as an important addition to basic Tribal documentation. The partnership organized for this project includes the Department of Energy, the National Congress of American Indians (208 tribes), the Mne Sose Coalition (26 Tribes), the Fourth World Documentation Project of the Center for World Indigenous People, the National Indian Law Library, the Tribal Law and Government Center of the University of Kansas Law School, the University of Arizona Library, the Spirits of the Land Foundation, the EPA's American Indian Environmental Office and Tribal Operations Committee, and others.

For more information on Tribal Programs within OPPT, contact Kathy Hogan, the OPPT Tribal Coordinator, at (202) 260-9349 (Internet: hogan.kathy@epamail.epa.gov).



Partnerships with State and Tribal Organizations

Darlene Harrod, *Environmental Assistance Division*

In an effort to ensure that EPA toxic and pollution prevention programs are responsive to state and tribal concerns, EPA's Office of Pollution Prevention and Toxics (OPPT) and Office of Enforcement and Compliance Assurance formed the Forum on State and Tribal Toxics Action (FOSTTA). Since April 1991, EPA, the states, and tribes have been working together to forge a cooperative relationship to incorporate state views into important elements of EPA's programs. Today, FOSTTA is composed of a group of about 35 state and tribal environmental officials and convenes three times each year in the Washington, DC, area to exchange information and provide feedback to EPA management and staff.

FOSTTA currently consists of four issue-specific projects and two workgroups. In brief, the projects and workgroups do the following:

The Chemical Management Project evaluates the use of information on existing and new chemicals and how this information can be accessed by various organizations and the general public.

The Lead Project reviews initiatives within the national lead program, such as the development

of training, accreditation and certification requirements for lead abatement professionals.

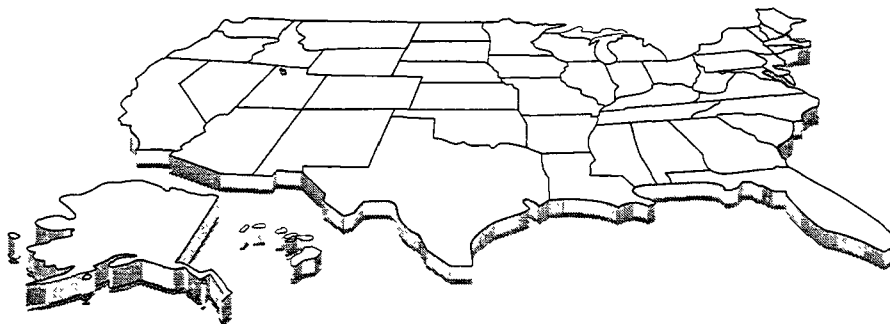
The State and Tribal Enhancement Project focuses on getting community, state, and tribal input on environmental protection initiatives.

The Toxics Release Inventory (TRI) Project entails working together to ensure the best way to make information collected under TRI available to the public and how EPA can help state programs serve their constituents.

The Environmental Justice and Pollution Prevention Workgroups discuss current issues and initiatives in their areas to ensure that these considerations are incorporated into the work of each of the four FOSTTA projects.

Through FOSTTA, the states and tribes have provided constructive comments and suggestions to EPA on issues considered in all of these projects and workgroups, as well as on major initiatives, including state access to Confidential Business Information and OPPT's pilot effort to develop tools and approaches useful in communities, and the Baltimore Community-Based Environmental Project.

For more information, please contact Darlene Harrod, EPA's FOSTTA Coordinator, at 202-260-6904.



Community Based Environmental Protection- Protecting People and Places

Christine Augustyniak, Deputy Director, *Environmental Assistance Division*

Community based environmental protection is a refocussing of the Agency's work so that we respond not only to legislative and executive mandates but also to the actual needs of specific places. When 'real' people think of their environment they don't necessarily think of it the way we at EPA Headquarters do; issues are not air issues as distinct from water or solid waste or toxic chemicals issues. What concerns people is the interaction of these traditional EPA issues with everyday concerns; such as trash collection, quality of public parks, etc.; that are not matters which EPA addresses.

Although EPA will continue to have a role in promulgating regulations and in setting national standards, and the Office of Pollution Prevention and Toxics (OPPT) has and will continue to have the role of minimizing or preventing risks associated with exposure to toxic substances, it is also important that we contribute what we can to local efforts to implement holistic, place-based, environmental protection. How will we do this?

In May of 1995, the Office of Prevention Pesticides and Toxic Substances (OPPTS) laid out a strategy for its role in place-based environmental protection [OPPTS is the Office within EPA that manages OPPT and the Office of Pesticides Programs (OPP)].

This strategy was based on a recognition of five factors:

1. OPPTS has a large and unique collection of information about chemicals. This information includes toxic substances and pesticides data in addition to the Toxic Release Inventory (TRI) which collects and releases to the public information about emissions of high concern chemicals to the air, water, and land.
2. OPPTS has a variety of technical guidance and analytical tools for gathering data and assessing the risks and benefits of industrial chemicals and pesticides.
3. The statutes which OPPTS implements allow us the flexibility to develop chemical management strategies that take into account local environmental and economic needs.
4. The statutes which OPPTS implements deal with all areas of the environment together, rather than separately, such as addressing pollution to air, water and land. This makes us good partners.
5. OPPTS currently participates directly in several place-based management projects. Participating in these projects, which include projects in the Great Lakes and Chesapeake Bay



as well as Lead Environmental Justice Pilot Grants, has given us experience in place-based projects which can be transferred to new projects.

Given these five factors, OPPTS concluded that the most important short-term contribution we at headquarters could make was to develop a catalogue of tools- including databases and analytic methods, which could be used in place-based projects. This compendium of information is what we refer to as the 'Catalogue of Tools'.

EPA Offices in Washington are not alone in this re-focussing. The regions have been instructed by Deputy Administrator Fred Hansen to devote 20 percent of their resources to direct participation in community-based projects, which is to say working with the stakeholders in the state and local governments as well as with community groups.

All of the Headquarters offices have been asked to develop strategies to support the regions in their place-based activities. Other offices, including the Office of Water and the Office of Research and Development, have also assembled databases and methodologies into toolboxes.

The OPPTS catalogue consists of a variety of types of tools. Some are reports and hotline numbers, which though available elsewhere are included for easy reference. Some are the databases and analytic methods used in OPPTS assessments which will allow others to perform customized, place-based, analyses. For example, in the annual data release under the Toxics Release Inventory (TRI)

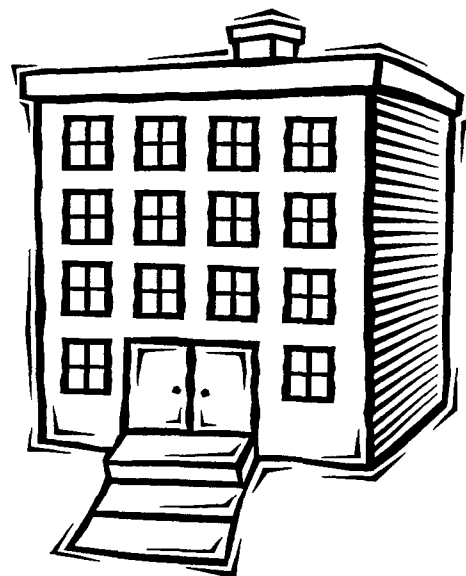


Program (OPPT issues some standard reports, such as total emissions by state), using the TRI data would allow a community to focus on emissions of particular interest- perhaps air emissions

of heavy metals in a particular county. This kind of analysis can help a community set priorities and determine on which environmental problems it should focus attention. Analysis may reveal that fewer heavy metals are emitted to the air than previously suspected- perhaps in this community there is a different issue which deserves priority.

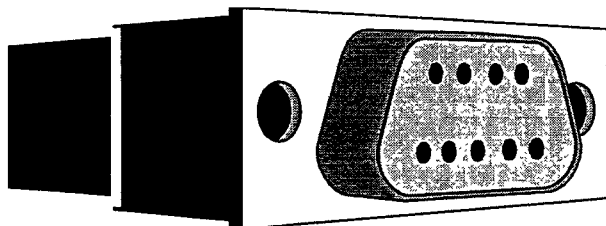
How far are we in implementing this strategy? At present we have a draft Catalogue of Tools and are evaluating opportunities to field-test the document and answer the question, "Does it serve the need we have designed it to serve?" After completing a number of field tests the catalogue will be revised to incorporate what we have learned. We will also be assessing how our tools should be linked with the tools being assembled by other EPA programs. After all, in a community, toxic substance issues are not discrete from other issues. Once revisions are complete we will be making the catalogue widely available- enabling communities to have more information and consequently more involvement in determining the characteristics of their own environment.

For more information about Community-based Environmental Protection, contact Christine Augustyniak at (202) 260-1024.



Voluntary Electronic Submissions, Increasing Efficiency in the Information Age

Gerry Brown, *Information Management Division*



The Toxic Substances Control Act (TSCA) requires industry to submit information and studies, and conduct testing for existing chemical substances under Sections 4 and 8. Under normal TSCA reporting conditions, OPPT receives approximately 1500 submissions each year, based on existing statutory and regulatory requirements; each submission represents on average between three and four studies. In addition, OPPT can initiate specific data (study) call-ins. For example, the Interagency Testing Committee established under TSCA identifies chemicals for which member agencies have concerns and need additional information. OPPT writes rules under TSCA 8(d) that require companies to submit copies of any studies they have conducted for these chemicals.

When OPPT receives a study under TSCA, we log it into our system, then duplicate and distribute it to government scientists for review and analysis. We also have a process to briefly define the study and its findings, using indexing terms to categorize the study and its results. This summary information is made available through the TSCA Test Submissions (TSCATS) database [see *Chemicals in the Environment*, Summer 1995, page 4], which is available online for use by government officials and the general public. It is only a pointer system to the large volume of unpublished studies, however. OPPT also microfiches the studies; full texts are

available on paper or microfiche through the National Technical Information Service (NTIS).

TSCATS now includes information on over 80,000 studies; industry estimates that these studies represent an investment in excess of \$7 billion. The test information indexed in this database can be very useful for government and industry, and is of interest to many other parties as well. Handling, indexing and retrieving this unpublished information accurately and in a timely manner has become increasingly difficult and expensive. OPPT realizes that it would be far more efficient if these data were transmitted and managed electronically. We have been working with industry officials who share our interest in reducing the amount of paper and streamlining our process.

The first pilot effort was led by industry, in response to a data call-in for chemicals (siloxanes) identified by the Interagency Testing Committee (ITC). Based on requirements defined by industry, the ITC, and OPPT staff, industry developed a model software application for submitting summary data on computer diskette, in addition to the usual paper copies of the tests themselves. Following that pilot effort, OPPT has continued to work with industry representatives from interested companies and industry associations to take this effort further. The Chemical Manufacturers Association (CMA), the Synthetic Organic Chemical Manufacturers Association (SOCMA), and the Chemical Industry Data Exchange (CIDX) are interested in pursuing electronic submittal of full text (including charts and tables) as well as the summary or indexed information.

Following the pilot effort for siloxanes under

TSCA 8(d), OPPT worked with CMA to define the most important summary information elements (study abstracts and index information that mirrors what is in TSCATS). CMA designed and produced a cover sheet for voluntary submittal of this information under TSCA 4 and 8. We expect this next pilot to begin in mid-1996. The cover sheet will expedite the processing, review, and public availability of test information; it will reduce database errors. Savings will be realized in reduced process and data management costs for OPPT; reduced human resource costs, with index terms and abstracts aiding in scientific retrieval, screening and review; considerably cheaper and quicker access to summary information; and improved quality through standardized format and terms. This is a first step to familiarize companies with standard requirements and concepts of electronic commerce for TSCA data. OPPT and CMA will evaluate it to determine if anticipated savings in time and money, and improvements in quality and availability are realized. We hope it will initiate a process that will result in full-text submittal of test data under TSCA Sections 4 and 8.

In addition to the cover sheet pilot, OPPT is exploring other voluntary electronic submission pilots. Current efforts include:

- Putting the CMA cover sheet on the Internet, to develop an interactive, on-line means to complete and transfer the information to EPA and to the TSCATS database.
- Working with industry to conduct one or two additional efforts to collect TSCA 8(d) data on chemicals identified by the ITC. As with the siloxanes project, these efforts have an additional component. Studies are not simply submitted by individual companies; data on the ITC-designated chemicals are collected and

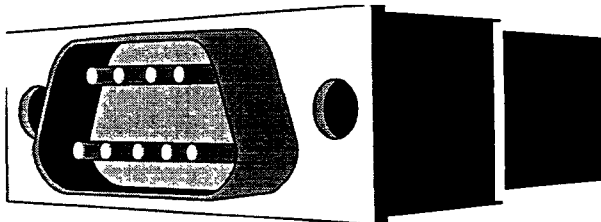
consolidated by industry into a single database; it includes information about individual studies, which can also be cross-referenced.

- Piloting the submission of an entire study in one or more electronic formats. OPPT is pursuing the transfer of full texts with one or two companies via floppy disk or CD ROM or mag cartridge.

As we pursue these voluntary pilot efforts, OPPT and industry participants want to address generic issues, such as how to include documents with confidential business information in an electronic process. OPPT needs to reach key players in industry and other groups who have an interest in or knowledge about electronic commerce. This includes skeptics. Therefore OPPT is sponsoring an effort to assess the overall interest in and support for electronic submission of TSCA data. An independent consultant has been identifying stakeholders and discussing issues and possibilities with them. As a result of this effort, OPPT expects to convene a series of meetings to discuss issues and concerns, define possibilities, and to monitor OPPT progress with the various pilots. Ultimately we are seeking a consensus to

establish principles and processes for electronic submission of TSCA data.

We believe that electronic submission of data would bring benefits for the Agency, industry and others who are interested in environmental data. Electronic transfer of TSCA studies, including the test summaries, would help insure that industry, government, and other users understand the findings similarly-- or that



differences are identified and discussed. While there are still skeptics in industry, many recognize the advantages in terms of their own internal data management and the efficiency of data transfer to EPA. It seems that the greatest potential benefit to industry is the cost savings that might be realized by avoiding unnecessary expenditures for duplicate studies. Timely availability and a better characterization of studies in TSCATS could help companies narrow the number and range of studies they

need to characterize a particular chemical. Participants in this voluntary effort believe that we also realize intangible benefits by building cooperative relations and developing joint projects.

Electronic commerce will provide benefits for all of us, including the public, by improving the timeliness, completeness, accuracy, availability, accessibility, and understandability of environmental information.

Right-to-Know: A Mission for All

John Chelen, *The Unison Institute*

When the Emergency Planning and Community Right-to-Know Act of 1986 (Title III of the Superfund Amendments and Reauthorization Act) was passed, an extraordinary framework for community involvement in pollution prevention and emergency preparedness was created. Ordinary citizens would be empowered through the use of data that had been previously available only to a privileged few.

However, EPCRA also marked a sea change in thinking about how, in general, government data should be shared. Additionally, with the explosive growth in the Internet and the World Wide Web, our expectations of what government agencies should be doing also has changed. We now have every expectation that government should actively seek out ways to communicate with the public and encourage their use of information.

What is RTK?

At its heart, "Right-To-Know" (RTK) refers to more than the provision of information about potentially dangerous activities. Although the original advocates who helped pass EPCRA relied upon a rationale that was built upon the

fears of another Bhopal, RTK is a much more fundamental right. Reporters and investigators call for RTK for many kinds of issues, including election campaign finance data, government procurement information, budget and expenditures, and agency rulemaking.

From this perspective, RTK is founded upon a concern for fundamental fairness. Government should not act without the explicit consent of the governed. Unless the voter is aware of the rationale and basis for a decision, that voter is not fully franchised. This means that RTK is a fundamental aspect of "Due Process." Unless adequate information is made available, any process, and any resultant decisions, are inherently unfair.

When we consider environmental protection, it's easy to understand how RTK applies. If facilities are permitted to emit toxic waste, then the public is entitled to know how much waste is emitted and what the effects of those toxics may be. If a facility is to be located in a community, the community is entitled to know what risks are associated with that facility.

If we look at other government programs, then we can see that RTK should apply there as

well. If the government is spending money, RTK applies so that we know who receives the money, what they are providing, and how well they have done the job. Similarly, a legislator's voting record and list of campaign contributors must be known.

Implementing RTK

At its heart, RTK is accomplished by collecting information and then re-distributing it, typically by a government agency. However, RTK is more. RTK data must be comprehensive -- we need access to national data. In order for the people in a community to understand what is going on in their own home town, they need to be able to see what is going on in other similar communities. Moreover, RTK data must be put in perspective by providing other data that complete the picture.

Toxics data alone is valuable, but it is even more valuable when combined with census and health data.

The technology selected for providing RTK data is also important. Modern computer technology makes distribution of the data over computer networks ideal, especially since the data are likely to be quite large. However, some people do not have or can not use computers, and need the information distributed on paper. Therefore RTK data require a range of distribution methods, from high-tech Internet Web pages, paper reports, and direct technical assistance.

Finally, government has to encourage the actual use of the information. We need to know how people in our local communities can put the information to use and encourage that process. We have to make sure that local reporters can research and develop stories, that zoning and planning agencies can include the data in their own decisions, that local industrial plants can track their own behavior, and that our regulatory and permitting

processes encourage citizens to become informed and involved.

False arguments about RTK

Some people have argued that RTK programs are "regulatory, top-down" or "command-and-control" approaches, where the strong arm of government forces industry to comply with complex regulations. Nothing could be further from the truth. A typical regulatory approach might involve putting further limits on emissions or forcing polluters to buy more pollution control equipment. Alternatively, having polluters provide RTK information on the potential harm they are inflicting on others is not a "command-and-control" approach. In fact, it is close to a pure "laissez-faire" market-driven approach. Citizens are free to take any steps they wish. Any corrective action is left up to the marketplace. Citizens are free to decide which products to buy, which companies' stock to purchase, which Congressman they wish to vote for, and which businesses they want to have in their communities.

Arguments are also made that RTK would infringe on secrets that polluters have a valid right to keep, either those involving business secrets or national security. However, RTK laws are designed to provide information on potential public harm without divulging legitimate intellectual property or military secrets. We have yet to witness or document any major case in which secrets were improperly divulged.

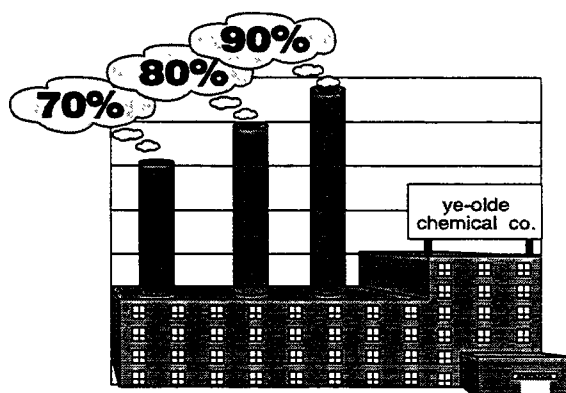
The Future

We are seeing other federal agencies, and states and local government as well, embrace RTK. Our elected officials know that RTK makes good politics - it engenders trust and participation by the electorate. The U.S. Departments of Housing and Urban

Development, Energy, and others, are moving to expand their RTK efforts. The Office of Management and Budget is working to help provide access to more information through the Internet and is encouraging efforts to coordinate and link federal data. There is literally a race on by various agencies to see who can provide the best service to the public through the Internet.

Nonetheless, if we want substantive RTK information, we will have to continue the struggle to make it meaningful. We must urge EPA to make RTK a key part of all ongoing regulatory programs. We need EPA to encourage every program office to actively encourage the use of its information by the general public. We must highlight the brave steps that some offices take, especially when it entails risk to them that their own flaws and mistakes might be made visible. We need to make sure government employees, congressmen, and industry representatives are supported and rewarded when they take steps to meet RTK challenges.

We also have to encourage industry to act proactively on its own behalf. The leadership of major industrial firms have acknowledged that RTK information has been useful to them and made them aware of ways to save money. They also acknowledge that the burdens of an RTK reporting program are much less, and inherently provide more flexibility, than prior regulatory approaches. We need to help them encourage other firms to embrace RTK techniques and voluntarily support new RTK initiatives. We need to encourage industry to work with government, environmental advocates, the media, and academia, to fulfill the promise of RTK.



Developing Customer Service Standards for the Partnership Programs

Darlene Harrod, *Environmental Assistance Division*

Executive Order 12862, Setting Customer Service Standards, directs all executive departments and agencies to establish and implement customer service standards to ensure that the Federal Government provides the highest quality service possible to the American people. At the U.S. Environmental Protection Agency (EPA), workgroups were formed to develop and implement standards for the following core processes: Permitting; Pesticide Registration; Research and Demonstration Grants; Rulemaking; Public Access; State, Tribal, and Local Program Grants; Enforcement

Inspections and Compliance Assistance; and Partnership Programs.

Programs such as Waste Wise, Water Alliances for Voluntary Efficiency (WAVE), Green Lights, 33/50, Climate Wise, and the Pesticide Environmental Stewardship Program promote partnerships with large and small businesses and other organizations to create opportunities for demonstrating environmental protection leadership. These efforts complement traditional, regulatory approaches to environmental protection by emphasizing

pollution prevention, common sense, flexibility, and economic performance. EPA publicly recognizes participants and their successes in enhancing environmental quality and public health. The development of customer service standards will be a continuous process to strengthen our partnership programs. Primary customers of the Partnership Programs are the large manufacturing and service firms; small and large businesses; hotels and motels; nonprofit organizations; utilities; agricultural organizations; and local, state, and municipal agencies.

The draft Customer Service Standards Workgroup for Partnership Programs developed the **draft standards** listed below.

- 1) We will always treat our customers with professional courtesy and respect.
- 2) We will proactively provide our customers accurate, up-to-date, and reliable information, products, and services, including high quality documents and publications.
- 3) We will actively listen to our customers' concerns and needs regarding our services and will develop technical assistance services, where possible, designed to address those needs and concerns.
- 4) We will ensure that inquiries will be referred to the right office and individual in EPA, or beyond EPA, if appropriate. We will encourage customers to report back on unsuccessful referrals.
- 5) We will respond as expeditiously as possible to inquiries for information.
- 6) We will strive to make information available through various channels, including electronic media, faxes, and intermediaries such as state assistance organizations, trade associations, and state agencies.
- 7) We will recognize and publicly acknowledge the accomplishments of our customers who achieve success in voluntary programs.
- 8) We will make every effort to streamline and make customer reporting requirements as practical and least burdensome as possible.

EPA is collecting internal and external comments before finalizing the standards. The comments will be reviewed, and changes will be incorporated into the draft final standards. Next year, emphasis will be placed on developing and distributing a customer satisfaction survey for EPA's external customers.

If you would like to submit comments on the standards, please send them to Darlene Harrod **no later than July 8, 1996**, to U.S. EPA, Mail Code 7408, 401 M Street, SW, Washington, DC 20460 (telephone: 202-260-6904; e-mail: harrod.darlene@epamail.epa.gov; fax: 202-260-2219).



As referenced in the introduction, the Pollution Prevention Information Clearinghouse (PPIC) has available a document entitled "Partnerships in Preventing Pollution: A Catalogue of the Agency's Partnership Programs". To order a copy of the Catalogue or a fact sheet which includes contact telephone numbers for each of EPA's 28 partnership programs, call the PPIC at (202) 260-1023.

Also visit EPA's Partners for the Environment home page at <http://www.epa.gov.partners>