# Public Interest Group Initiatives at the Local Level

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## ABSTRACT

In August 1988, the Silicon Valley Toxics Coalition was the first group in the United States to compile and publicly release data from the new Toxics Release Inventory. The data — which documented millions of pounds of toxics released into the environment by the largest and most famous Silicon Valley electronics giants — were reported by the media throughout California and the United States. This coalition urged the self-described "clean industry" to drastically reduce its chemical use and emissions (particularly the CFC 113 discharges that proved to be the largest in the nation). Since then, and after other significant national media attention, the high-tech industry has significantly reduced its reliance on CFCs. In addition, the Santa Clara County Manufacturers Group — the local trade association for the Silicon Valley industry — began publishing an annual report in 1989 that documents its annual emissions as reported under TRI.

Production of synthetic chemicals in the United States, which became a significant industry in 1918, has expanded enormously since World War II. Figure 1 graphically depicts this escalation and highlights industrial usages of synthetic chemicals, including high-tech electronics.

Until rather recently, most people in the United States and throughout the world thought that the electronics industry was not part of the toxics release problem — that it was, as self-described, a "clean" industry. However, over the past decade we have learned that the "clean" industry was in fact highly polluting. More Superfund sites are located in California's Silicon Valley — a hotbed of high-tech industry — than anyplace else in the United States. (Superfund sites are so polluted that the U.S. Environmental Protection Agency (EPA) has put them on a priority list for cleanup.) Groundwater pollution at 29 of these sites directly stems from the use and misuse of solvents used in high-tech industry.

In addition, a high incidence of air pollution and ozone depletion from these industries, as well as occupational health hazards, has been noted. Occupation-caused disease among semiconductor workers is about three times that of the national manufacturing average.

## Introducing Right-to-Know in Silicon Valley

In response to this situation, the Silicon Valley Toxics Coaltion produced a booklet, *The Legacy of High-Tech Development: The Toxic Life Cycle of Computer Manufacturing*, which states that the industry presents some significant problems. We were able to determine this through the development of the right-to-know movement in the United States, of which the Toxics Release Inventory (TRI) is but one aspect.

You might think that right-to-know legislation was introduced without difficulty. In fact, it has a rich history of struggle in the United States dating back to the 1970s when, coming out of the labor movement, the concept of worker right-to-know was introduced in the first attempt to pry

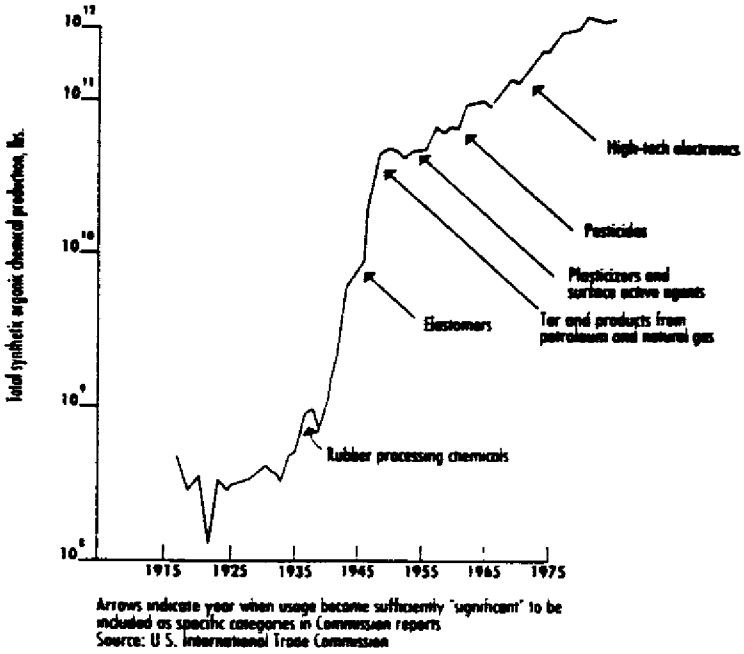


**Figure 1.—Production of synthetic organic chemicals in the United States from 1918 to 1976. Arrows indicate year when usage became sufficiently significant to be included as specific categories in Commission reports. Source: U.S. International Trade Commission, 1978.**

loose toxicity and chemical information and organize to combat industrial diseases.

This difficult, laborious process took place in many different industries. Mining is one of the main examples, with its high incidence of black lung disease. The community right-to-know movement started at the local level in the early 1980s when communities began developing and passing right-to-know ordinances.

The Silicon Valley Toxics Coalition was one of the first groups to pass a right-to-know ordinance, back in 1983. We had to overcome significant resistance from industry and government, who were uncomfortable with the notion of making this kind of information public for a variety of reasons, including concerns about proprietary or trade secrets. (Industries also cited additional paperwork as a possible problem.)

When we started organizing for right-to-know ordinances in the Silicon Valley, some communities and industries drafted a proposal that requires companies to report toxics information to the local government but made it a crime to distribute that information to the public. We had to organize to overcome that type of approach and eventually ended up with a local right-to-know ordinance in 1983 that became California law in 1985. Subsequently, the federal government picked up the idea.

Our history with federal right-to-know dates back to 1988, when the Coalition compiled and released data to dramatize some of the hazards associated with high-tech production technology to the Silicon Valley and communities across the country. This was long before EPA had compiled the data — or anybody else for that matter. We didn't have access to a computer system; we got a box-load of paper from our state agency and sat down one weekend and typed information into a personal computer using a database program. This information showed beyond a doubt that millions of pounds of toxics were being released, discharged, and transported off-site from a relatively small number of companies.

Initially, we compiled a list of 25 companies. When we surveyed the top 12 companies in Silicon Valley, we found they were releasing millions of pounds of toxics, data that we put in a report and gave to the media (Table 1). Because this shocking information was being reported for the first time, it received quite a bit of attention. Some of the following information was presented:

*Twenty-five major area companies are dumping millions of pounds of toxic chemicals into the environment each year according to data recently filed with EPA and the California Office of Emergency Services. This new information, required pursuant to Title III of the Superfund Amendments of 1986, is now publicly available as of July 1, 1988. The composite data for Silicon Valley reveals that 25 companies with 41 facilities in Santa Clara County admitted discharging over 12 million pounds of 34 different toxic chemicals into air, land, and water. Almost 2 million pounds went to the air through stack emissions, another 2 million pounds were classified as fugitive emissions, and about 8 million pounds were discharged into sewage treatment plants or otherwise disposed of.*

*Under the current legal regulations, this type of pollution is largely legal although considered immoral by many. The Silicon Valley Toxics Coalition has charged that industry has enjoyed a free ride to use the air as an open sewer for its waste disposal and has issued a call for industry to implement toxics use reduction and source reduction measures to cut down on their use and disposal of these chemicals.*

*Some companies are already beginning to respond to community pressures in other parts of the country. Monsanto, for instance, has acknowledged almost 18 million pounds of discharges nationwide but has promised to reduce those emissions by 90 percent in four years and is approaching a zero discharge or zero tolerance stance.*

**Table 1.—The TRI "Dirty Dozen" for Silicon Valley for 1987–88 reporting years.**

| NAME | 1987 + 1988 TOTAL RELEASES (lbs) |
|---|---|
| IBM | 2,798,000 |
| Xidex | 2,237,000 |
| UTC | 1,955,000 |
| National Semi | 1,630,000 |
| South Bay Circuits | 1,477,000 |
| Hewlett Packard | 1,214,000 |
| Lockheed | 1,198,000 |
| Siliconix | 1,140,000 |
| LSI Logic | 996,000 |
| Del Monte | 781,000 |
| Advanced Circuit Tech. | 778,000 |
| FMC | 609,000 |

Source: Title 22-TRI Data

We also publicized our letter to IBM, urging it to follow Monsanto's example — to disclose their yearly emissions of freon worldwide and pledge prompt phaseout of these ozone-depleting chemicals. IBM's San Jose plant listed more than 1.3 million pounds of ozone released into the atmosphere, which turned out to be the largest single source that we have uncovered. This material can be found in our booklet, *The Citizen's Guide to the New Federal Right-to-Know.*

Next, we compiled two years' worth of data on combined releases, showing that companies that had been deemed largely "clean" were in reality releasing millions of pounds of pollutants into the environment.

An interesting sidelight concerns a company called Advanced Micro Devices. When we published our initial list, this company's releases — over 2 million pounds in the first reported year — placed them at the top of our list. The company took great offense at this and, to restore its credibility, placed a full-page newspaper ad to accuse the Coalition of deliberately distorting and misstating the information. Fortunately, EPA also saw this ad and looked into its records, where it discovered that we had simply published EPA data. The Agency then wrote a letter to that effect, which helped set the record straight. Advanced Micro Devices later filed amended reports with release data that removed it from the "Dirty Dozen" list.

## Using Right-to-Know Information

The Coalition used right-to-know information not only to publicize and dramatize the problems but to put out some challenges to local industry and, in particular, to companies that were discharging the largest amounts of chlorofluorocarbons (CFCs) — the largest source of the discharges into the atmosphere.

Table 2 is a compilation of the 1987 data, by chemical, on the companies in Silicon Valley. We took this information — particularly the IBM data — and, on Earth Day 1989, organized a large rally with other groups in front of IBM's plant gates and invited Ralph Nader, a well-known environmental and consumer advocate in the United States, to speak. We challenged IBM to adopt aggressive goals and timetables to completely eliminate CFCs.

At the time, IBM didn't have much to say; it was not ready to set phaseout goals and timetables. However, IBM reported to the media that it would comply with the Montreal Protocols — the international treaty to phase out CFCs — which would take effect in the year 2000. The Coalition replied that, because of the huge volume IBM was discharging, it should set an example and take much more aggressive action.

By Earth Day 1990, IBM had come up with a new program. It committed to an aggressive phaseout of CFCs, not only in San Jose but worldwide, with a phaseout date of 1993, which at that point was the most rapid of any of the major electronic companies in the world. IBM also invited the Coalition and other groups to tour its Silicon Valley plant and view a new process that ultracleaned disk drives without using CFCs, just soap and water, a fairly low-tech solution to an enormous environmental concern. Now, IBM is rapidly phasing out the use of that class of chemicals.

We surveyed the 25 largest CFC dischargers in northern California, asking them for goals and timetables for complete phaseout of CFC production processes We then published a list of companies that had set aggressive goals and timetables and those that hadn't and called them

**Table 2.—1987 data on chemical emissions from Silicon Valley industries.**

| CHEMICAL NAME | FUGITIVE EMISSIONS (lbs/yr) | STACK EMISSIONS (lbs/yr) | TOTAL AIR EMISSIONS | OTHER DISCHARGES & OFF-SITE DISPOSAL[1] | TOTAL |
|---|---|---|---|---|---|
| Freon | 1,448,299 | 376,710 | 1,825,009 | 20,142 | 1,845,151 |
| TCA | 316,212 | 440,132 | 756,344 | 191,452 | 947,796 |
| Hydrogen chloride | 0 | 274,065 | 274,065 | 0 | 274,065 |
| Acetone | 100,675 | 94,745 | 195,420 | 196,577 | 391,997 |
| Methylene chloride | 73,220 | 110,010 | 183,230 | 13,642 | 196,872 |
| MEK | 31,489 | 64,713 | 96,202 | 54,939 | 151,141 |
| Xylene | 15,055 | 42,566 | 57,621 | 111,872 | 169,493 |
| Styrene | 27,000 | 3,600 | 30,600 | 0 | 30,600 |
| Tetrachloroethylene | 29,800 | 0 | 29,800 | 0 | 29,800 |
| Sulfuric acid | 0 | 28,888 | 28,888 | 274,074 | 302,962 |
| Methanol | 8,500 | 6,200 | 14,700 | 52,600 | 67,300 |
| Sodium sulfate | 0 | 9,283 | 9,283 | 2,969,326 | 2,978,609 |
| Phosphoric acid | 102 | 7,677 | 7,779 | 86,226 | 94,005 |
| Sodium hydroxide | 0 | 6,577 | 6,577 | 425,060 | 432,437 |
| Hydrogen fluoride | 0 | 6,300 | 6,300 | 61,849 | 68,149 |
| Glycol ethers | 0 | 4,776 | 4,776 | 76,030 | 80,806 |
| Phenol | 0 | 3,900 | 3,900 | 11,600 | 15,500 |
| Aliminum oxide | 0 | 0 | 0 | 395,381 | 395,381 |
| Nitric acid | 0 | 0 | 0 | 84,961 | 84,961 |
| Copper & compounds | 0 | 0 | 0 | 73,714 | 73,714 |
| Hydrochloric acid | 0 | 0 | 0 | 53,500 | 53,500 |
| Ethylene glycol | 0 | 0 | 0 | 43,125 | 43,125 |
| TOTAL[2] | 2,062,277 | 1,975,994 | 4,038,271 | 4,926,804 | 8,965,075 |

[1] Including discharge to sewage treatment plants
[2] Total includes category "others"

"leaders and laggards." Laggards were largely defense and aerospace contractors who were hindered by military specifications that required using CFCs. Military standards continue to be a big problem in the United States. The Coalition is trying to help speed up the process whereby the military will revise those specifications.

After we generated a number of reports that focused on emissions and called for reductions, the Santa Clara County Manufacturing Group, a trade association that represents most of the electronic manufacturing companies in our area, decided to start compiling this information and putting their own spin on it to publicize emission reductions. For the last couple of years, it has been publishing a report that identifies specific reductions by chemical and plant.

We've come a long way — from the initial resistance and hostility to the point where industry is putting out emission reports. In some cases, some of these reductions can be as simple as housekeeping — putting lids on solvent tanks or educating employees about handling solvents — and process changes that can be accomplished with relative ease. Of course, in some significant areas, solutions will not include short-term, easy fixes but substantial research and development to find safer production processes that use clean technologies.

Another Coalition effort involves the Campaign for Responsible Technology, started by labor, environmental and local public interest groups, and computer professionals all around the country who are focusing on problems at SEMATECH, the research consortium based in Austin, Texas. We are asking this consortium of the 14 largest semiconductor companies to develop safer production technologies in partnership with the federal government because we realize that individual companies cannot do this kind of research economically. The progress being made at the consortium is impressive, not only in terms of CFC reductions but also in ways to move away from using toxic gases in semiconductor processing.

## Conclusions

The TRI has been useful in dramatizing toxic emissions and encouraging reductions. However, pollutants don't respect boundaries. Multinational and transnational companies also want uniform reporting. With standard regulations and requirements, companies are less likely to play different jurisdictions off against each other.

This approach to reductions is often largely voluntary and nonregulatory. Although 85,000 companies report, EPA does not have 85,000 inspectors to verify the data, so enforcement is pretty spotty. That's where some of the nongovernmental organizations come into play — to enforce compliance through citizen action.

The Silicon Valley Toxics Coalition, as well as a number of other U.S. groups, has been trying to negotiate good neighbor agreements with companies that are major polluters in our neighborhoods to get them to meet goals in reductions and also allow citizen inspection.

Lastly, it is important to make the distinction between waste reduction and decreasing toxics use. Increasingly, the United States and some countries in Europe are looking at the product itself — distinguishing between waste and toxic chemical production and use. Many of the chemical companies are making great progress in reducing waste, but often the product they make is toxic.

Our focus on the electronics industry has been to help it wean itself away from toxic products. That's why IBM's switch from CFCs to nontoxic soap and water is such an important example.

If we can begin to round off the tremendous increase in the production of synthetic organic chemicals, we will see the light at the end of the tunnel.

# Closing Plenary

# Closing Plenary: Implications of Toxics Release Reporting for Other Countries

**MODERATOR: Richard P. Wells**
*Abt Associates Inc.*
*Cambridge, Massachusetts*

**Shinichi Arai**
*Organization for Economic Cooperation and Development*
*France*

**Andrew Lees**
*Friends of the Earth*
*United Kingdom*

**Hans-Peter Baars**
*TNO—Environmental and Energy Research*
*The Netherlands*

**Christopher Ian Pickard**
*IPC Policy Unit, Department of the Environment*
*United Kingdom*

**Jack Holland**
*Commonwealth Department of Arts, Sport, the Environment, Tourism and Territories*
*Australia*

**Mariá Kazmuková**
*OUZP ZILINA*
*Czechoslovakia*

Representatives from four countries — The Netherlands, United Kingdom, Australia, and Czechoslovakia — and one multinational organization — the Organization for Economic Cooperation and Development (OECD) — as well as a spokesperson for the nongovernmental organizations (NGOs) addressed the final session of the conference. Their comments provided a perspective from non-United States representatives at the conference on key issues raised by the international application of a concept similar to TRI and key potential benefits and obstacles to such a program. In addition, several countries described experiences with similar programs. These comments addressed a number of common themes as well as topics that were specific to each country represented.

■ The first common theme was *the need for international coordination in the development and implementation of national programs modeled on the TRI.* A number of countries already have programs similar to TRI in place; others are considering them. During the conference, representatives from industry noted that, in the absence of coordination, a patchwork of inconsis-

tent national programs would create substantial reporting burdens; users of these data said they would face potentially insurmountable data compatibility problems.

**Shinichi Arai,** speaking for the OECD, addressed the theme of coordination of programs. He noted that an international system would

- focus on a common set of chemicals,
- provide common basic information that countries could use as a basis for further cooperation (for example, prioritizing chemicals and identifying candidates for international actions, such as the OECD risk reduction program), and
- encourage the development of national right-to-know programs.

Mr. Arai also said, however, that a number of points should be considered when developing an international system. In particular, he noted that, while some countries already collect the kind of data found in TRI, collection systems vary. Some countries use licensing or permit systems, while others have safety reporting systems. Countries also differ in the use they make of these data. Some countries use risk-based approaches (taking into account exposure and toxicity), while others rely exclusively on emissions data. Finally, each country has different traditions and existing laws that govern the public's right to know about environmental releases. In addition, Mr. Arai also raised the need to address certain more technical issues — such as a common standard for reporting criteria and a harmonized list of chemicals.

Mr. Arai felt the first step in encouraging an international system is to facilitate the international exchange of information received by OECD. He felt that adoption of TRI by member countries would make it easier for others to introduce a similar system. Finally, Mr. Arai felt that the OECD might be the most appropriate organization to undertake the harmonization work needed to introduce TRI internationally. Since the OECD is a consensus organization, general support from member countries will be needed for this activity to succeed.

**Andrew Lees** of Friends of the Earth UK, who represented the NGOs attending the conference, also addressed the need for coordination as part of six points about TRI presented by the NGOs (Table 1). Mr. Lees called on industry to operate everywhere to the highest prevailing world standards of health and safety and environmental protection and called on industry to extend the TRI approach beyond the United States. He argued that consistent standards are important because "there is little point . . . in having a perfectly green developed world if all the hazardous technology...is merely exported to the potentially new markets of the developing world."

**Table 1.—Six points presented by NGOs to the International Conference on Reporting Releases of Toxic Chemicals.**

| | |
|---|---|
| 1. | A public right to know is a fundamental attribute of democracy. |
| 2. | The environment belongs to us all, and everyone has a right to know about the sources (potential and actual), nature and impacts of industrial hazards, and pollution. |
| 3 | Industry should be required to operate everywhere to the highest prevailing world standards of health and safety and environmental protection |
| 4. | Transnational industrial companies (TNCs) should be required to provide regulatory bodies and, through them, the public with TRI-equivalent data for all of their facilities worldwide. Such TNCs should be seen to set an example in good neighbor relations. |
| 5. | The legislative and other actions indicated above should be actively supported by both the U.S. Environmental Protection Agency and the Commission of the European Communities as well as governments. |
| 6. | The TRI methodology should be extended to encompass the full range of industrial operations that affect the environment. |

Mr. Lees also argued that transnational companies that collect management information for the TRI on U.S. operations should report these data for their non-US operations as well. These transnationals, he stated, "should play a leadership role and release the information independently of the degree of enlightenment of governments and the cultural perspective of regulators. If industry truly wants to prove world leadership when it comes to environmental protection, we throw down this gauntlet: make the TRI equivalent data available for all your operating sites wherever they are."

In his final two points, Mr. Lees called for concerted international support for the adoption of a TRI-equivalent system. He also proposed that the Commission of the European Community support adoption of a TRI and called for the extension of TRI methodology "to encompass the full range of industrial operations that impact on the environment."

**Hans-Peter Baars** of the Netherlands Organization for Applied Scientific Research, Toegepast Natuurwetenschappelyk Onderzoek (TNO), described the Dutch emissions registration system and compared it to TRI by illustrating the key differences between the two (Table 2). The Dutch system has both a collective and an individual component. The collective component applies to smaller industrial facilities that would not meet reporting thresholds under TRI and to certain non-industrial activities, such as emissions from traffic, shipping, households, sewage treatment, and agriculture. Emissions estimates for these activities are based on volumes of activity and emissions factors. The individual component applies to specific facilities with 10 or more employees and is based on specific calculations.

**Table 2.—Comparison of the United States' TRI and the Netherlands' reporting system.**

| U.S. TOXICS RELEASE INVENTORY | DUTCH EMISSIONS REGISTRATION SYSTEM |
|---|---|
| Toxic chemicals (320) | All substances (700) |
| Air/water/soil/off-site | Air/water |
| Facility totals | Detailed |
| Yearly totals | Emission periods |
| Every year | Every other year |
| Releases | Emissions |
| Estimation by company | By TNO & company |
| Selected activities | All activities |
| Selection >25,000 U.S. | Weighting system |
| Enforced by law | Voluntary cooperation |
| Right-to-Know | Trade secret |

Information gathered by the Netherlands' emissions registration system is generally more detailed than that gathered by the TRI. Unlike TRI, which is based on annual facility chemical release totals, the Dutch system covers individual units within a facility, such as boilers or cracking units, and provides data on throughput, pollution control equipment in place, and the timing of releases during the year. In addition, the Dutch system covers all emissions of concern from a given facility, including acid rain chemicals, such as sulfur dioxide gases, and chemicals associated with global warming, such as methane and $CO_2$.

The scope of the Dutch emissions registration system is somewhat narrower than that of the TRI. When started in 1973, it covered all facilities with 10 or more employees; the number of facilities included in the system has, however, been reduced from 6,300 in 1973 to 700 in 1990. Data have identified that a smaller number of companies cause most of the pollution. In addition, this system covers releases to air and water only; off-site transfers and solid wastes are not included.

Although reporting under the Dutch system is voluntary, few companies have refused to participate. Unlike TRI where emissions are estimated by each company, the Dutch government, through TNO, provides technical assistance to companies in estimating emissions. Mr. Baars noted that this approach is important from a quality assurance viewpoint because it ensures use of a consistent method at all similar facilities. However, this approach is resource intensive: the initial round covering 1973–78 required 500 person-years of labor. By 1990 when the number of companies in the system had been reduced to 700, resource requirements had been reduced to 30 person-years.

**Christopher Ian Pickard** of the United Kingdom's Integrated Pollution Control Policy Unit, Department of the Environment, reported on a system to provide environmental data to the public that was installed in April 1990. Unlike those in the United States and the Netherlands, this system is tied directly to plant operating permits. Plants in the most seriously polluting industries are required to obtain a permit to operate those processes. The United Kingdom is now looking at these industries sector by sector, determining what constitutes best available techniques for the industry, deriving limits based on those techniques, and imposing those limits on industry. Operators are then required to maintain the permitted processes and supply monitoring data to the government, which is now proposing to aggregate the information annually and make it available through public registers, along with detailed data about application and permitting.

Two other speakers described issues facing countries that are just beginning to consider making emissions data available to the public. **Jack Holland**, from the Commonwealth Department of Arts, Sport, the Environment, Tourism and Territories, outlined initial efforts underway in Australia, where the government has recently released a public discussion paper on the proposed national waste minimization and recycling strategy, which is closely tied to an emissions inventory. Australia also recently announced it will establish an Environment

Protection Agency. Separating the environment from the Commonwealth Department of Arts, Sport, Tourism and Territories will give it much greater prominence.

No timetable has been set yet for the development of an Australian release inventory, and a number of issues have to be resolved before the inventory can be fully developed. Chemical control in Australia is a state matter; the states license all facilities. The new Australian Environment Protection Agency will not have the same degree of authority over state matters as the U.S. Environmental Protection Agency. Unlike Europe and the United States where environmental statutes pertaining to chemicals have been in place for some time, Australia's Chemical Notification and Assessment Act has been operative for less than 18 months, and industry is still absorbing the effects of this act. Mr. Holland was not sure how industry would handle additional requirements that followed closely on the Chemical Assessment and Notification Act; however, he recognized that multinational businesses with overseas parent companies are already introducing these requirements into all operations.

Other issues that must be addressed relate to types of facilities included in a release inventory. Australia's chemical industry is based largely on imports. Recently, a large storage facility went up in flames, an incident that created a great deal of public interest in chemical storage and distribution facilities rather than chemical manufacturing facilities. Australia needs to determine whether to confine the release inventory to manufacturing or to extend it to other industries. In addition, Australia must look at threshold reporting levels.

**Mariá Kazmuková** described the situation in Czechoslovakia and other post-Communist countries:

> *Many of the things I've heard sound so much like beautiful poetry and science fiction of the future, but the problems of my country, Czechoslovakia, as well as of other post-Communist countries, are quite different. Our messy political situation as well as an economic slowdown make people less interested in environmental problems. For the past 40 years, we have been unable to obtain correct and full information about our environment. Technologies that consume too much energy, a lack of economically based behavior, missing information and measurements, together with the absence of not only environmental but even of democratic education — that is a very sad picture. I would like to express my hope that this situation will be soothed step by step.*
>
> *I think such a situation is dangerous because people, not only in Czechoslovakia, but in many other poor countries as well, will not care about the environment, but simply prefer to satisfy temporary social needs. That's the danger, but I hope this situation can be improved. This conference is evidence that the problem is not only one for the developed countries; it is also a problem of a global approach. We all clearly have a common future.*

■ A question that arose repeatedly in commentary by non-US participants in the conference was *the question of public access to environmental data.* In large measure, the power of TRI derives from the fact that it is available and readily accessible to the public. Members of the public with access to quite common information technology can, moreover, easily obtain detailed plant- or location-specific data. Data availability has made TRI, in effect, a powerful public report card on industry's environmental performance, and many corporate actions to reduce releases can be traced to this fact. In other countries, the traditions of public access to environmental data are not as completely established as in the United States. Several speakers anticipated that their countries would resist making release data widely available to the public.

**Shinichi Arai** stated that an international TRI would encourage the development of right-to-know laws in member countries to ensure public access to information on chemicals or facilities. Mr. Arai noted that OECD also has some systems to facilitate public access to information that may prove useful to developing a release inventory. In applying these systems, however, it is important to recognize that individual countries' situations differ.

**Andrew Lees** emphasized that public access goes beyond making data available:

> *A right to know is not a right to know if you know where to look, if you know how to ask a technical question. A right to know is a civil or public service ethos among regulators and administrators that makes it easy for the public to exercise their right to know. What we have seen from the NGO perspective, exemplified by the staff from EPA, is that enlightened attitude, that 'how can we help*

*you?' attitude that really empowers the public in their right to know.*

Mr. Lees also argued that:

*No one actually owns the environment (from a philosophical perspective). We all have common rights in it, but we cannot regard it as a common whereby we seek to maximize our exploitation of it before somebody else grabs their share. We've got to take that common interest perspective on the environment. That means, in effect, that if somebody wishes in the service of their own private or corporate interests to make use of the environment, they have a responsibility to use it right in a careful, caring way, but they also have a moral obligation to make public everything that they're doing. Because the environment is a public good that is subject to the impact of their activities. Therefore, we would say you have no right to claim that you can hide everything. There may be a justification for trade secrets to be protected, but again the EPA rule is good there: a reasoned case must be made; you have to prove your case. So it should be a stringent test to have a claim of commercial confidentiality or trade secret to protect your interests from public scrutiny.*

**Hans-Peter Baars** noted that the Netherlands' voluntary system is not available to the public on a plant-specific basis: "The Community Right-to-Know Act does not exist in our country yet. We can only publish aggregated data, and only the government has access to these detailed data."

**Christopher Ian Pickard** noted that the United Kingdom is now proposing to provide data to the public on authorization permits for seriously polluting industries. Detailed data concerning both the permits and operator monitoring of the processes to which the permits apply will be made available through public registers.

Australia, also, has no tradition or law about community right to know, according to **Jack Holland.** Because states and other Commonwealth departments have considerable influence, Mr. Holland said, "We will have to examine if such laws will be enacted. Again, this will require cooperation from the states and from other Commonwealth departments. From what I've heard this week, the value of a release inventory is very much diminished if excessive use of trade secrecy provisions can be made."

In Czechoslovakia and other post-Communist countries, according to **Mariá Kazmuková,** the situation is made even more complex by the absence of information and measurements and a democratic tradition. These circumstances and the economic situation in the post-Communist world are dangerous because "people . . . will not care about the environment but simply prefer to satisfy temporary social needs."

■ Finally, some of the speakers addressed other topics that pertain to the *relationship between a release inventory and other aspects of risk management.*

**Shinichi Arai** noted that approaches to risk differ among OECD member countries, with some countries focusing only on release data while others couple release data with toxicity and exposure data to develop risk-based approaches.

**Christopher Ian Pickard** underlined the relationship between an inventory and an integrated pollution control approach. He noted that, in the United States, TRI had been an impetus for the development of an integrated pollution approach, whereas in Europe an integrated pollution approach might result in an emissions inventory.

The OECD has made a ministerial recommendation for an integrated pollution prevention and control approach. A European Commission directive is being negotiated for an integrated approach, and the United Kingdom has recently started to integrate its approach to pollution prevention.

**Jack Holland** reiterated these points:

*As we have all heard very strongly and repeatedly, a release inventory provides many opportunities for pollution prevention and source reduction. These two concepts lie at the heart of our waste minimization and recycling strategy. We [the United Kingdom] think a public emissions register is something that goes along very closely with that.*

# INTERNATIONAL CONFERENCE ON REPORTING RELEASES OF TOXIC CHEMICALS

***November 13-15, 1991 • Vienna, Austria***

*Sponsored by the*
*Office of Prevention, Pesticides and Toxic Substances*
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