

Look Out, Here Comes Pollution Prevention!

by Tony Luppino

With the start of a new year, Great Lakes United has launched an exciting new effort: the Pollution Prevention/Zero Discharge Project. The disappointing track record of massive government and industry pollution control programs undertaken since the first Earth Day in 1970 has prompted the environmental community in recent years to rethink its fundamental strategies. The result has been a shift in emphasis away from simply controlling pollution toward trying to prevent it—to reduce or eliminate pollutants so that they do not need to be controlled.

In a review last year of two decades of costly American pollution control efforts, longtime environmental activist Barry Commoner concluded that, although the nation's progress was generally mediocre, it was nonetheless studded with occasional dramatic success stories. In a few cases, levels of specific pollutants in the environment had declined dramatically since 1970. These success stories had one thing in common: the production and use of the pollutant in question was phased-out due to government policy. The technology of production was changed so that the pollutant was no longer needed or its discharge no longer required.

Commoner's assessment shows us that, if we really want to have something to celebrate on the thirtieth anniversary of the first Earth Day in the year 2000, all efforts must be made to prevent pollution before it needs to be controlled. Great Lakes United's Pollution Prevention/Zero Discharge Project is designed to make such pollution prevention efforts a reality in the Great Lakes region.

GLU's pollution prevention plan of action for 1991 includes a number of important elements. One of these will be an effort to publicize pollution prevention "success stories," examples of relatively successful pollution prevention efforts carried out by private corporations, communities, and county, state, provincial, regional and federal governments.

We have already begun extensive research to compile information on specific corporations and communities that have successfully prevented pollution, as well as specific processes, methods, and government policies being used to prevent pollution and move towards zero discharge. This information will be organized in the form of a Pollution Prevention Clearinghouse based at the Buffalo office of Great Lakes United.

During the second half of 1991 Great Lakes United will launch a media campaign to highlight pollution prevention success stories and to criticize companies in the Great Lakes Basin that are failing to implement pollution prevention programs.

Another important part of GLU's 1991 pollution prevention program will be activities designed to help

citizens of the Great Lakes region understand pollution prevention/zero discharge, and to provide them with training for their efforts to push for pollution prevention/zero discharge programs in their communities.

We plan to teach activists how to organize community campaigns to negotiate "Good Neighbor Pollution Prevention Agreements" with local industries. These are negotiated, semi-official contracts in which polluting facilities agree to prevent pollution by changing their operating procedures or production processes.

In order to bring pollution prevention information and training directly to activists, we will conduct six community training workshops for environmental and labor leaders in locations around the Great Lakes Basin during 1991. Each will be designed to meet the information and training needs of its participants, concentrating on pollution prevention issues or policy goals important to the area in which the workshop is being held.

Details of our first training workshop have already been set. It will be held on April 13 and 14, at the Lewiston #2 Fire Company in Niagara Falls, New York.

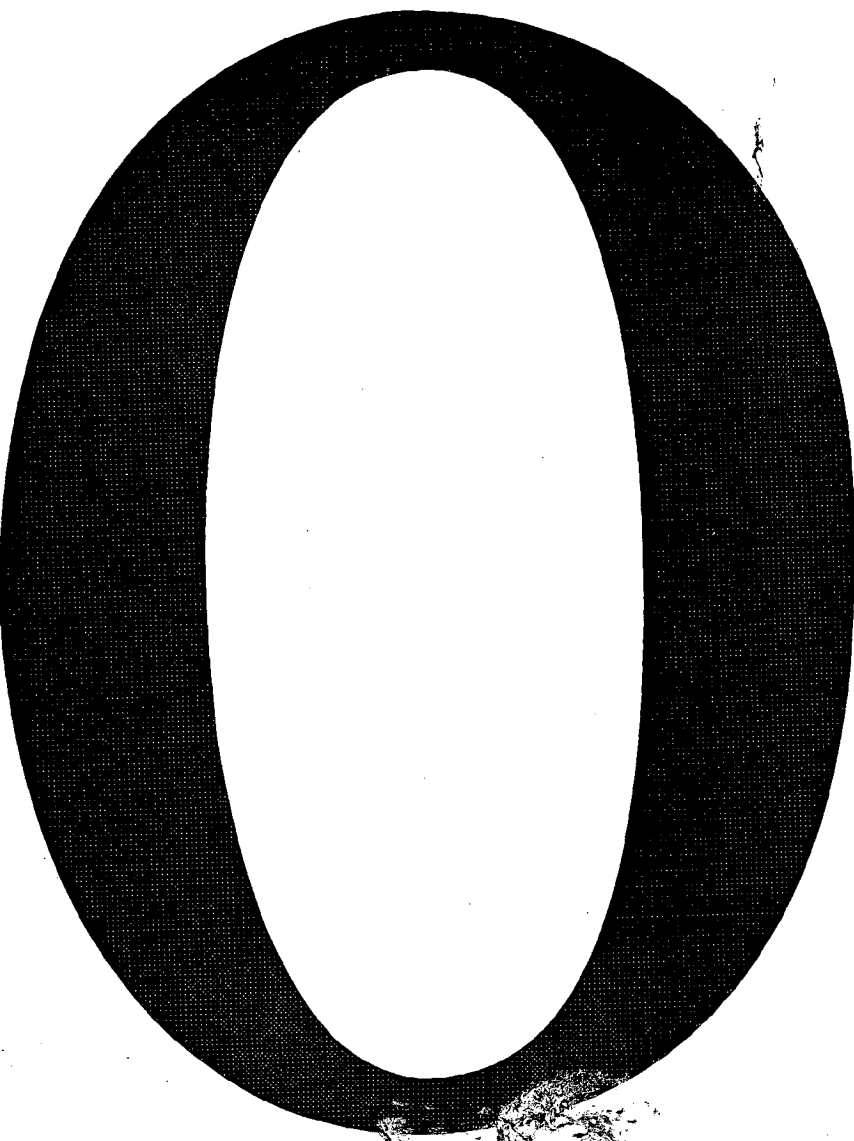
The GLU Pollution Prevention/Zero Discharge Project will publish two citizen guides during the summer and fall of 1991.

The first guide, *Achieving Zero Discharge in the Great Lakes Areas of Concern*, will show citizens how to work for the incorporation of pollution prevention/zero discharge goals and programs into Remedial Action Plans.

The second guide, *Achieving a Zero Discharge Community*, will offer detailed information on pollution prevention success stories and on organizing good neighbor pollution prevention campaigns.

In November we will hold a conference to be called "Great Lakes Basin Citizens' Conference on Pollution Prevention and Zero Discharge." This conference will bring together environmental and labor leaders from throughout the Great Lakes Basin to share information on pollution prevention efforts in their own communities and to plan strategies for winning government and industry pollution prevention policies and programs that will quickly move the Great Lakes Basin towards zero discharge.

Three community training workshops to be held by GLU in Ontario will be part of a larger campaign to push for the inclusion of programs and requirements for pollution prevention into the Ontario MISA. This campaign, which will be carried out by Great Lakes United, Pollution Probe, the Canadian Environmental Law Association, and other Ontario organizations, will press for a new policy requiring that Pollution Prevention/Toxics Use Reduction Plans be part of all new permits and permit renewals approved for industries under the MISA program.



The meaning of zero

by John Jackson

Zero discharge of a substance means *no* human release of that substance into the environment.

Persistent toxic substances are having sometimes insidious, sometimes dramatic, but always serious impacts on the wildlife and the people who live in the Great Lakes Basin. We cannot afford to continue building up the toxic legacy we are passing on to our children and grandchildren. The only sane, rational approach for dealing with persistent toxic substances is not to release them into the environment at all—zero discharge.

Surprisingly, considerable debate swirls around the meaning of the very straightforward word "zero." It means "none."

"Zero" does not mean "virtual." We cannot completely remove all persistent toxic substances from the Great Lakes ecosystem. Some of them occur naturally. In addition, we will not be able to remove all of the huge amounts that we have already released into the environment. Our goal is to "virtually" eliminate these substances from the Great Lakes environment. But to achieve this goal, we must stop all ongoing discharges of these chemicals. To do this we must have zero discharge, not "almost zero."

Zero discharge does not mean reducing discharges to the point where they have no impact on life. We cannot risk waiting to eliminate discharges until we can measure the impacts. It is too late at that point; damage has already been done and the hazardous chemicals have been irretrievably dispersed

throughout the environment.

Zero discharge does not mean reducing discharges to the point where we cannot detect them. This approach does not guarantee safety. Even very tiny, unmeasurable quantities of persistent toxic substances build up over time to dangerously high levels in living organisms.

Zero discharge does not mean ensuring that contaminant levels in the discharge are at concentrations no higher than in the water or air the user took from the environment. Our concern is with total quantities of a chemical discharged, not with the concentrations. Again, small quantities of persistent toxic substances build up to very high levels in living organisms.

Zero discharge does not necessarily mean using the best currently available technology to control pollutants. The urgency of achieving zero discharge is so great that we must develop new technologies, and change or stop our use of persistent toxic substances to eliminate their release into the environment.

Some charge that if we define "zero" to mean "none," we are proposing something that cannot be achieved. This is not true. We can achieve zero discharge if we stop using hazardous persistent toxic substances.

Defining zero discharge literally forces a shift from futile and misleading measurement of releases to looking for ways to avoid using toxic chemicals in the first place. This is why a literal definition of "zero" as "none" is critical.

Tryens on Good, Bad, Ugly Toxic Use Laws

Jeffrey Tryens is associate director of the Center for Policy Alternatives based in Washington, D.C. The center works with state officials and advocacy groups to develop innovative policies in a broad range of areas, including women's, voters', and environmental issues and ways to use private capital for the public good.

In cooperation with the National Environmental Law Center and the Center for Public Interest Research, the center recently released *An Ounce of Toxic Pollution Prevention: Rating State's Toxics Use Reduction Laws*.

BPP: What types of toxic use reduction/pollution prevention policies and programs do you think states should be developing and implementing?

Tryens: In *An Ounce of Toxic Pollution Prevention* we looked at ten state laws, evaluating them against what we think is a model law. And the law which came out ahead, was the Massachusetts law. That law includes many of the most important components of a good state toxics use reduction law. The first and most important is that it has to clearly say in law what it means to achieve toxics use reduction. The second most important thing is that it must require each company in industries that are covered, and those industries may be both broad and targeted, to develop a toxics use reduction plan, by law, which the state then has the authority to review and approve. In order to figure out which industries should be covered by toxics use reduction requirements, the state needs to look at what its problem chemicals are and start there by going to every industry that uses these chemicals. And there must be a strategy to continue to expand the list of chemicals.

Now the state of New York has just enacted a waste minimization law last year which includes that specific requirement. Now that's a waste minimization law and it is not specifically oriented towards toxics use reduction but I really think it's an excellent step because what the State can do if they do not approve those reduction plans is they can revoke the licenses or the permits of those industries which enable them to emit hazardous materials into the environment. And that is, in my opinion, an excellent handle that every state

should have and be employing.

The third piece of an ideal toxics use reduction law is to go along with that plan, the industries must be required to report each year on their progress towards the plan's reduction goals. They report both to the community and to the State. Number four is that there should be some way to give an incentive, although we would say that the worker involvement was probably a little more important. And number five is the state ought to be there in some technical capacity, like Massachusetts which has established the Toxics Use Reduction Institute, to work with companies, once again establishing what the state's priorities are, and then aggressively going out to those companies and saying look, here's the hammer, you have to do it, but here's the carrot, we will help you. And then the state also needs to empower state agencies in some way to carry out these other requirements. That is to say, if the companies are not achieving their goals, like the NY law, the state can give notice that in another year if you haven't done it, whether the notice were that we approved, you will no longer be able to use this state's waterways and this state's air to get rid of your hazardous byproducts. And then there's the last thing which I think is very important, and when we did our study we found it was the hardest information to come by, is that the states really have to figure out ways to fund these programs at levels that are meaningful. A number of states have started toxics use reduction programs using two or three-year EPA grants. That's fine as a start, but they really have to come in and raise more funds perhaps like Massachusetts once again, which established user fees where those monies come from industry and are specifically targeted towards toxics use reduction activities. We believe that in fact this is another one of those examples where the state can come in and establish programs that will in the long run save these companies money. We think that toxics use reduction makes sense economically over a ten-year span. There is some investment that has to happen, but the way all the numbers are going in terms of the cost of hazardous waste management we think that if the state can help, and this is so true in so many instances with environmentally positive pro-

grams, the state can help make it less of a short-term expense to companies so that they will make it in the long run.

BPP: Would you see economic incentives such as tax incentives being helpful, or other forms of assistance such as grants and low-interest loans?

Tryens: Once again, we've got the stick and the carrot here. Louisiana has a law now which ties tax breaks to environmental perfor-



mance. Well, with some significant screaming from industry, the State of Louisiana has enacted this new law which has reduced the amount of tax breaks any company in that state receives on the basis of a scoring scheme from 0 to 100, and anything less than 100 you get a certain amount knocked off the tax abatement you receive.

BPP: That's a great idea.

Tryens: It really is and it just makes no sense at all for us to subsidize a company's ongoing environmental pollution problems within the state. So I think that is an excellent model, and Louisiana is the only state in the union that has it right now. From what I know about states that have done significant amounts of assistance (and two of those states are Illinois and Massachusetts), the people who run those programs view them as being quite successful. Unfortunately, they can't reach a lot of companies usually because you're talking about a staff of two or three people. So what you do a lot of is you do training sessions and seminars. You don't really do the in-plant analyses that are needed.

BPP: Now, you would see the need, if we could meet the need, of really expanding toxics use reduction offices or departments within the state governments?

Tryens: I think that there is a prime market for some really smart universities and colleges around the country to start really training a new type of engineer, because I think the toxics in the long run, it will not be achieved strictly through carrots and sticks at the state level. It will have to be achieved through training a whole new generation of engineers and scientists and managers of industry to think in a new way. Certainly there is a lot of educating the state can do, but it's really a huge task.

BPP: So, you would not only support expanded staffing for toxics use reduction offices in state governments, but you see a real need

to expand the educational and training resources that are out there in the university systems to really start training larger numbers of individuals who have the skills needed to be toxics use reduction specialists.

Tryens: Right, and there's a market for that. One of the things we have to figure out how to do is being smart about the industry. You know, we have the Arthur Andersons of the world who are accounting firms who are leaping into this sort of thing by doing in-plant environmental assessments. And I think that it's good and they're being smart about it. I also think that we need to do this scientifically and in as sound a way as possible engineering-wise.

BPP: An organizational question for state governments. Kenneth Geiser of the Massachusetts Institute of Technology has argued and believes that there is a need to separate the assistance function of state government from the regulatory function.

Tryens: I have a couple of thoughts on that. I think it makes a lot of sense for the industry to be able to get the person that it's coming to help them as not being the same person who will nail them if they're not right up to standard because regulators, the people who come in and inspect your processes, and so forth, are just not viewed by plant managers as the people who are going to help you. So, I think it makes a lot of sense to split that off as a function obviously, as long as they're working very closely and there are very strict rules about what information can be transmitted and what information cannot be transmitted. On the other hand, I strongly support the recommendation of the United Nations Special Commission on the Environment and the Economy made two or three years ago in the report "Our Common Future," that environmental quality and economic development ought to be as closely linked as possible in any nation or, in this case, state development strategy. It's very important to keep in mind. That is to say, what we're doing here is we're saying that environmental concerns must be introduced into how industries work from the "get-go." How industries work from the get-go is often influenced by what the state economic development strategy is, which businesses the state is trying to attract, and what we want them to do. If those toxics use reduction concerns are not intimately intertwined, those state development choices are always going to be behind the eight ball. So I would also say that states need to make a much stronger effort in making sure their development people are totally on-board with this idea of toxics use reduction. They aren't on-board now.

Get Your Hot Info Right Here!

Using Right-To-Know in the Fight Against Toxics by Jeffrey Tryens & Richard Schrader, Center for Policy Alternatives. Excellent case studies of U.S. citizens' efforts to fight toxic hazards. Available from Center for Policy Alternatives, 1875 Connecticut Ave. NW, Washington, DC 20009, (202) 387-6030.

Cutting Chemical Wastes by INFORM, Inc. A study of 20 chemical plants in Ohio, New Jersey and California. Detailed description of the pollutants generated by the facilities and the source or toxics use reduction activities at each. Available for \$50 (\$37.50 for non-profits) from INFORM Inc., 381 Park Ave. S., New York, NY 10016, (202) 689-4040.

Citizen's Toxics Waste Audit Manual, by Ben Gordon & Peter Montague. Explains how to use the Toxic Release Inventory data in

public campaigns for pollution prevention of toxics use reduction. Available from Greenpeace USA, 1436 U St. NW, Washington, DC 20009, (202) 462-1177.

An Ounce of Toxic Pollution Prevention: Rating States' Toxics Use Reduction Laws by William Ryan, National Environmental Law Center and the Center for Public Interest Research, and Richard Schrader, Center for Policy Alternatives. Available for \$15 from Center for Policy Alternatives, 1875 Connecticut Ave. NW, Washington, DC 20009, (202) 387-6030.

Pollution Prevention in the Great Lakes: A Survey of Current Efforts and an Agenda for Reform, by Marcia Valiante and Paul Muldoon, Canadian Institute for Environmental Law and Policy, 517 College St. E. 400, Toronto, Ontario M6G 4A2.

Bulletin of Pollution Prevention

By Gilbert
editing, design, production

Pollution Prevention Project

Tony Luciano
researcher/letter
Karen Murphy
field coordinator
Violante and Muldoon
information manager

Great Lakes United

1300 Howard Ave., Buffalo, N.Y. 14222, or
P.O. Box 948, Station A, Wichita, Ontario N0A 1K0
The Pollution Prevention Project and the
Bulletin of Pollution Prevention are funded
by the Great Lakes Protection Fund

Basin Toxic Use Reduction Is in Its Infancy

by Karen Murphy

With the passage of the Emergency Planning and Community Right to Know Act (EPCRA) in the United States, politicians, citizens, regulators and industry for the first time have been given a comprehensive look at releases of toxic chemicals into the environment.

This new awareness has helped to instill a realization that conventional pollution control is not working and has helped initiate the development of toxics use reduction laws around the country. So far, 17 states have passed some sort of toxics use reduction legislation.

The first EPCRA reports were shocking. An ALCOA facility in Point Comfort, Texas released 465 million pounds of toxics in 1987; closer to home, Eastman Kodak's Rochester, New York, facility released 23 million pounds of toxics.

This information compelled U.S. decisionmakers to start looking at waste or emissions as a multimedia problem. Experience with banning chemicals also demonstrated that the most effective way to eliminate pollution was to discontinue the use of toxic chemicals.

Over the past five years decisionmakers, community residents and regulators have realized that the prevailing regulatory philosophy—controlling pollution at the end of

the pipe (or stack)—does not protect the environment. It has become clear that we need to move toward eliminating and reducing the use of toxic substances—in other words, toxics use reduction. As a result, many states have recently passed toxics use reduction laws.

A good toxics use reduction law needs several components to be effective:

- ▷ a definition of toxics use reduction and the methods for achieving it;
- ▷ planning and reporting requirements;
- ▷ technical assistance programs;
- ▷ regulatory authority to enforce the plans;
- ▷ general and specific reduction goals and targets;
- ▷ provisions for worker and community involvement; and
- ▷ a dedicated source of funding.

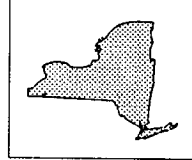
In the Great Lakes region, Illinois, Indiana, Minnesota and Wisconsin have passed toxics use reduction legislation. New York and Michigan have passed legislation dealing with hazardous waste reduction and are moving towards the development of programs and/or legislation aimed at toxics use reduction.

Pennsylvania and Ohio, have neither waste reduction nor toxics

use reduction legislation. Canada does not have a comparable federal program for toxics release reporting. In the Basin, neither Quebec nor Ontario have passed comprehensive toxics use reduction legislation. Ontario does have some technical assistance and research and demonstration programs for waste reduction. Quebec is currently developing a new plan which will address waste reduction.

New York

New York passed a hazardous waste reduction law this year which tied reduction planning to existing permits.



Generators are required to certify that a waste reduction program is in

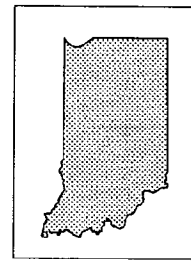
place and b) an adequate hazardous waste reduction impact statement (WRIS) has been developed. If the state determines that the WRIS is not adequate, it may decide not to issue or reissue a treatment, storage, or disposal permit. Although this is a waste reduction law, it is important in that reduction is tied to the issuance of permits.

Agency contact person: John Iannotti, Director, Bureau of Pollution Prevention, NYDEC, 50 Wolf Road, Albany, NY 12233, (518) 457-

7267.

Indiana

Last year the state passed the Indiana Industrial Pollution Prevention Act. The law defines pollution prevention



as "a practice that reduces the industrial use of toxic materials ... without diluting or concentrating the waste before the release, handling, storage, transport, treatment, or disposal of the waste. The term includes changes in production technology, materials, processes, operations, or procedures or the use of in process, in line, or closed loop recycling."

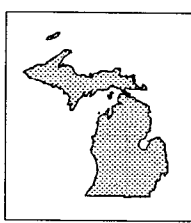
The law establishes an Office of Pollution Prevention and Technical Assistance within the Department of Environmental Management and empowers it to set up an information clearinghouse, award grants to support pollution prevention activities, sponsor pollution prevention pilot projects, and evaluate and develop regulatory opportunities for pollution prevention.

The law also establishes a Pollution Prevention and Safe Materials Institute to "encourage" and assist companies to develop multimedia pollution prevention plans and to establish a program for training pollution prevention planners. Funding to support this legislation is through general fund appropriations.

Agency contact person: Joanne Joyce, Indiana Department of Environmental Management, 105 S. Meridian, Box 6015, Indianapolis, IN 46206-6015, (317) 232-8603.

Michigan

In 1990 DNR released a draft waste prevention strategy that laid out reduction goals and a broad-



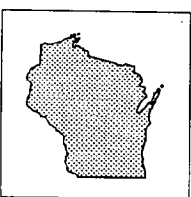
based plan for multi-media waste reduction and toxics use reduction.

Agency contact person: Val O-sowski, Michigan

Department of Natural Resources, Office of Waste Services, P.O. Box 30004, Lansing, MI 48909, (517) 373-0606.

Wisconsin

Wisconsin Act 325 was passed in 1989 to reduce the "use and release of hazardous substances, toxic pollutants, and hazardous waste"



and to promote "hazardous pollution prevention," defined as "changes in processes or raw materials that reduce or eliminate the use or production of hazardous substances, toxic pollutants and hazardous waste."

The law established a pollution prevention board to coordinate and monitor hazardous pollution prevention activities in the state, advise the Wisconsin Department of Natural Resources (DNR) and other government agencies, review pollution prevention audit grant ap-

...continued page 4

Whaddya Mean By That, Mister?

Here are definitions for some commonly used pollution prevention terms. Given the prevalence of government and industry environmental rhetoric, it is important for the environmental community to be precise in its use of terms—and to be aware when others are using them in restricted, euphemistic or misleading ways.

Zero discharge. (See separate article by GLU President John Jackson.)

Virtual elimination means near-complete elimination of the presence of toxic pollutants in the ecosystem. The concept of virtual elimination arises from recognition that it is impossible to totally eliminate toxic substances from the Great Lakes ecosystem because we cannot completely clean up or recapture those contaminants already released. In addition, some toxics occur naturally. Of course, only by achieving zero discharge is it possible to achieve virtual elimination.

Toxics use reduction means in-plant changes in production processes or raw materials that reduce, avoid, or eliminate the use of toxic or hazardous substances per unit of product. Toxics use reduction does not include things like incineration, transfer of waste from one medium to another, and offsite or out-of-process recycling. Toxics use reduction fundamentally changes the way industry thinks about toxic chemicals, questioning their use in the first place. Toxics use reduction encourages industry to go beyond a focus on waste to think about eliminating hazards associated with toxics use, such as worker and consumer product exposures. Toxics use reduction explicitly prohibits the shifting of toxic hazards from the environment to the workplace or consumers.

Sunsetting is a systematic process for phasing out (that is, ban-

ning after a period of time) the production and use of toxic chemicals, processes that create toxic byproducts, and products that are toxic or contain toxic material.

Source reduction includes actions or measures taken by hazardous waste generators that reduce the production or generation of hazardous and toxic wastes in the first place. Toxics use reduction, process and design changes that lead to reduced waste, and in-process recycling are all forms of source reduction. Out-of process recycling is not. While source reduction includes toxics use reduction, it also includes actions or measures that may reduce or eliminate the creation of toxic wastes without reducing or eliminating the use of toxic or hazardous substances as raw materials.

Waste minimization is another term we must be view with a great deal of caution and skepticism. It is very similar to the term waste reduction. Terms like waste minimization and waste reduction often signal that a company or government program is primarily designed to limit land disposal of hazardous wastes, as opposed to a multimedia toxics use reduction program, for example.

Waste reduction means measures or actions taken to reduce the volume and toxicity of wastes. While waste reduction includes toxics use reduction and source reduction, it is a much broader and less stringent term. Waste reduction includes out-of-process recycling, and it may also include measures such as dewatering, which reduces the volume of hazardous wastes. The point to remember is that waste reduction is a much more ambiguous term than either source reduction or toxics use reduction.

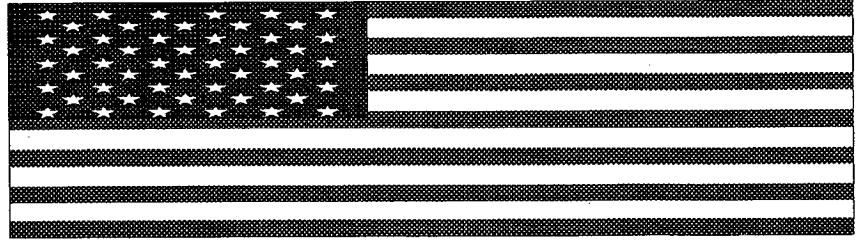
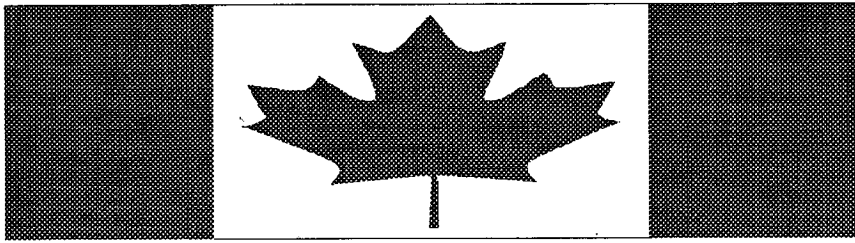
In-process recycling is the

reuse of toxic chemicals or their toxic byproducts within the process they are generated in. In-process recycling qualifies as toxics use or source reduction because chemicals move only inside a production process and never emerge as waste.

Out-of-process recycling is the reuse of toxic materials or their toxic byproducts by another manufacturing process or facility or product recycling facility. This kind of recycling is not a form of toxics use or source reduction because the toxic substances must be transported, creating risks for workers, the public, and the environment.

Pollution prevention means very different things to different people, just as the terms "natural" and "recyclable" mean one thing when uttered by cereal and plastic bottle manufacturers and quite another to the consumer who reads their claims. Pollution prevention in its strictest sense is almost the same as toxics use reduction, that is, programs or measures that avoid the generation of toxic pollutants by reducing their use, rather than capturing pollutants at the end-of-the-pipe. Some environmental policy advocates, such as Jeffrey Tryens of the Center for Policy Alternatives, consider pollution prevention something broader and less clear than toxics use reduction, including, for example, source reduction. Kenneth Geiser of the Toxics Use Reduction Institute sees toxics use reduction as a term applying mainly to the industry, while pollution prevention applies to agriculture, transportation, local governments, and other sectors. Industry, of course, interprets pollution prevention the most broadly of all, including in it such practices as reducing toxic waste by making it part of a product.

National Pollution Prevention: Talk, Talk



by Karen Murphy

The federal government has released its long-awaited "Pollution Prevention Initiative" for the Great Lakes and the St. Lawrence River, a document detailing pollution prevention programs announced in Canada's Green Plan. The initiative is disappointing to say the least.

In general, the initiative prescribes a multistakeholder process for developing federal pollution prevention strategies, provides for the development of demonstration projects, and plans education and outreach programs.

The multistakeholder process will assess current industrial plans for pollution prevention, identify barriers to achieving the virtual elimination of persistent toxic substances, and develop common pollution prevention solutions and actions for all sectors of society.

No specific substances are targeted under the initiative and strategies developed will be voluntary. "Sectors will be challenged to set targets and schedules for major reductions in the use, manufacture,

generation and discharge of persistent toxic substances."

Demonstration projects under the initiative will "showcase" specific pollution prevention technologies. The initiative also envisions development of a community outreach program to educate Canadians about lifestyle changes they can make to protect the environment.

A Pollution Prevention Centre will be established to facilitate and undertake these activities. The mandate of the St. Lawrence Centre in Montreal will be broadened so that it can play a corresponding role for the St. Lawrence Basin.

There are several problems with Canada's Pollution Prevention Initiative, but perhaps the most disturbing is that it fails to lay out any concrete actions to achieve reductions in pollution. There is no plan to determine specific reduction goals or to achieve them under strict timetables. Instead, strategy development has been abdicated to a multistakeholder process. In essence, the Canadian federal government is refusing to govern.

by Pete Kremer

In October the U.S. Congress passed the Pollution Prevention Act of 1990. The act mandated the establishment of a separate source reduction office within the U.S. Environmental Protection Agency (EPA), established a national policy (really a hierarchy) for the management of toxic materials, laid out a definition for source reduction, and amended the Emergency Planning and Community Right to Know Act to require reporting on industry source reduction and recycling activities. The act also provided for the establishment of a Source Reduction Clearinghouse.

The act authorized the appropriation of \$8 million a year through 1993 to undertake pollution prevention activities described in the law, and another \$8 million for grants to the states for pollution prevention activities.

The EPA first set up a Pollution Prevention Office in the summer of 1988. Last year's legislation specified additional duties for the new office:

- ▶ identification of measurable source reduction goals, strategies and timelines
- ▶ review of agency regulations for impact on source reduction opportunities
- ▶ coordination of source reduction activities within EPA
- ▶ assistance for adoption of source reduction technologies by industry
- ▶ development of source reduction training programs for agency and industry personnel
- ▶ identification of federal government opportunities, such as its procurement policies, to encourage source reduction; and

- ▶ identification of incentives and disincentives for source reduction.

This January EPA released its National Pollution Prevention Strategy, the framework under which it plans to undertake pollution prevention actions.

The strategy identifies two key avenues for action: existing regulatory programs and the Industrial Toxics Project. Within existing regulatory programs EPA will focus on multimedia coordination and investigation of "flexible, cost-effective regulatory approaches that avoid prescriptive approaches and rely on market-based incentives where practical and authorized by the law."

Under the Industrial Toxics Project EPA will identify 15 to 20 chemicals from the Toxic Release Inventory that present "significant risks to human health and the environment, and potential opportunities to reduce such risks through prevention."

EPA will ask major industrial users of these chemicals to participate in voluntary, measurable source reduction programs. The strategy sets a voluntary goal of reducing total environmental releases of these chemicals—rather than mandatory goals for releases from specific facilities—by 33 percent by the end of 1992 and 50 percent by the end of 1995.

The EPA's new Pollution Prevention Strategy, represents more of a policy statement than a plan for action. It calls for voluntary reduction rather than mandatory elimination of toxic releases, and even this limited action is restricted to a small subset of both toxic chemicals and their sources.

...Toxic Use Laws Around the Lakes

...from page 3

applications, and generally assess and report progress in achieving reductions in pollution.

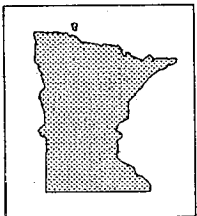
The board is also directed to establish a program in the extension service to promote pollution prevention. Program activities include providing educational and technical assistance to industry, working with DNR to develop audit information, and assisting the board in the development of an annual report. The law also established a grant program to assist industries in the development of hazardous pollution prevention audits.

DNR is directed to designate a hazardous pollution prevention coordinator responsible for coordinating pollution prevention efforts within the agency and with other governmental and private groups. The legislation was funded with an appropriation of \$271,700.

Contact person: Lynn Persson, Wisconsin Department of Natural Resources, P.O. Box 7921, 101 S. Webster Street, Madison, WI 53707, (608) 267-3763.

Minnesota

Last year the state passed the "Minnesota Toxic Pollution Prevention Act." The law defines pollution



prevention as "eliminating or reducing at the source the use, generation, or release of toxic pollutants, hazardous substances

or hazardous wastes." The law establishes a pollution prevention assistance program to disseminate information, provide

technical research and assistance (including on-site consultations), and conduct outreach programs on pollution prevention. A grant program is set up to demonstrate or study specific pollution prevention technologies. The legislation also establishes a pollution prevention award program.

The law mandates the development of pollution prevention plans, annual reports on their progress, and plan updates every two years. If the Minnesota Pollution Control Agency finds the annual progress report inadequate it can take enforcement action. Failure to develop plans can result in a penalty of \$10,000 to \$25,000 per day depending upon the types of chemicals involved.

Citizens may petition the agency to review a pollution prevention plan if they feel that the progress report is inadequate.

The legislation is supported by fees paid by companies that file release forms under the Emergency Planning and Community Right to Know Act. The amount of the fee is based on the amount of pollutants released.

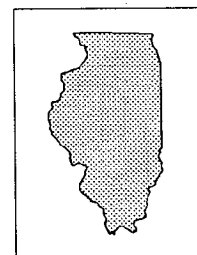
Agency contact person: Eric Kilberg, Minnesota Pollution Control Agency, Office of Environmental Analysis, 520 Lafayette Rd., St. Paul, MN 55155, (612) 296-8643.

Illinois

Illinois passed the Toxic Pollution Prevention Act. The law defines "toxic pollution prevention" as "in-plant practices that reduce, avoid or eliminate: (i) the use of toxic substances, (ii) the generation of toxic constituents in wastes, (iii) the disposal or release of toxic constituents into the environment,

or (iv) the development of products with toxic constituents."

The law establishes a Toxic Pollution Prevention Assistance Program to provide general information on pollution prevention and on-site technical consulting, and to sponsor or develop research and demonstration projects. Pollution prevention plans and progress reports are not required. However,



in order to receive technical assistance or regulatory relief companies should submit plans.

The law also directs the agency to coordinate and manage regulatory programs to promote pollution prevention, for example, the development of a manual to assist companies trying to incorporate pollution prevention into their permits.

Agency contact people: Bruce Rodman or Monica Martin, Illinois

Environmental Protection Agency, 2200 Churchill Rd., Springfield, IL 62706, (217) 782-3397.

Other Agency Contact People

Ontario: Ken Bradley, Ontario Waste Management Corporation, 2 Bloor St. W., 11th Fl., Toronto, Ontario M4W 3E2, (416) 923-2918.

Neil Ahlberg, Ontario Ministry of the Environment, Waste Management Branch, #2 St. Clair Ave. W., 14th Fl., Toronto, Ontario M4V 1L5, (416) 323-5189.

Quebec: Guy Dners, Ministry of the Environment, 3900 Rue De Marly, Ste-Foy, Quebec G1X 4E4, (481) 644-3422.

Ohio: Tony Sassom, Division of Solid and Hazardous Waste Management, OEPA, 1800 WaterMark Drive, P.O. Box 1049, Columbus, OH 43266-0149, (614) 644-3494.

Pennsylvania: Cathy Myers, Department of Environmental Resources, Bureau of Regulatory Council, City Towers, 3rd Fl., 301 Chestnut, Harrisburg, PA 17101 (717) 878-7060.