

Labor and Toxics Use Reduction: Opportunities and Challenges

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For more information, or to obtain a new 30-page manual for unions based on this booklet, contact MassCOSH at (617) 524-6686

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“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 or generation of hazardous by-products per unit of production so as to reduce overall risks to the health of workers, consumers or the environment without shifting risks between workers, consumers or parts of the environment.”

*Massachusetts Toxics Use Reduction Act
of 1989*

“We feel it is vital to the working people in western Massachusetts...that we receive the information we need to be involved in decisions made regarding toxics use reduction. Up until this point, very little information or educational material has been available to our member union locals on how they can play a role in reducing the use of toxics in their workplaces. Working people are the ones who use these job chemicals on a daily basis and are often the ones most affected. It is important that they be informed on issues that dramatically affect their health, workplaces and even communities.”

*Michael Filpi, Recording Secretary, Berkshire
Central Labor Council*

“Chemical hazards in workplaces and our neighborhoods have been a concern of ours for a long time. Our members work with chemicals every day of their lives and their expertise is an important piece of decision making in toxic use reduction. What has been missing are the educational tools to help have our voices heard.”

*Francis X. Callahan, President
Pioneer Valley Central Labor Council*

“Our members are strongly concerned about their health and the environment. Yet, they often feel that it is hard to play a role in toxic use reduction because of a lack of information and training . . . We believe our members would have useful ideas to make workplaces and communities safe since they are the ones who use these job chemicals on a daily basis and are often the ones most affected.”

*Jonathan G. Tuttle, President
Hampshire-Franklin Central Labor Council*

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I. Introduction

Workers are exposed to tens of thousands of toxic chemicals on the job. Hundreds of thousands of workers are made ill and die as a result of these exposures. New chemicals are introduced into American workplaces at a rate of 1,000 per year. In addition to exposing workers to health risks, toxic chemicals are moving into our communities at an alarming rate. Landfills are full. Groundwater is polluted. The air in many areas is unfit to breathe.

Toxic chemicals threaten the health and safety of Massachusetts' workplaces and communities. Industrial facilities in the state annually use more than 1.2 billion pounds of toxic chemicals. From auto repair shops and computer companies, to paper mills and chemical manufacturers, these facilities transport, handle, and release into our environment immense quantities of these dangerous materials.

We face the toxic challenge in our workplaces and in our homes. This booklet is about Toxics Use Reduction (TUR) - a strategy that seeks to minimize the use of toxics, and through this to minimize exposures and waste products. This booklet is designed to introduce TUR to labor unions and to help develop strategies to use TUR to clean up our workplaces while protecting jobs, improving job quality and building the strength of unions.

Over the past 50 years, careless management of toxic chemicals has caused serious damage to our environment. Every year, the 600 largest manufacturers in the state use more than 1.2 billion pounds of toxic chemicals. In 1993, over 320 million pounds of these chemicals were known or suspected carcinogens. These chemicals are transported through our communities, handled by workers, emitted into our air and water, and wind up in the products themselves.

Industry and government management of these toxic chemicals simply has not worked. There are over 8,000 confirmed and suspected hazardous waste sites in Massachusetts, and more than 4,000 spills of oil or toxics occur every year. Toxic contamination has shut down water supplies in over 100 towns in the state. A new and aggressive approach, with labor playing a strong role, is needed to protect ourselves, our families, and our communities from toxics.

Massachusetts citizens are exposed to toxic chemicals in many ways:

- Workers are exposed to toxic chemicals in the workplace.
- The transport, storage, and use of these chemicals inevitably causes accidents and mishaps.
- Industrial by-products are emitted from smokestacks into the air. Companies are also given permits to dump toxic chemicals into our municipal sewer systems or directly into waterways.

- Much of the waste is shipped out of state to hazardous waste landfills and incinerators, where it contaminates other communities.
- Chemical wastes are illegally dumped at sites which make up many of the state's 7,000 confirmed and suspected toxic dumpsites. and often end up contaminating our drinking water supplies. Toxic pollution migrating from these sites has already shut down water supplies in more than 100 Massachusetts communities.
- Toxic chemicals are contained in consumer products that we use in our daily lives.

The most effective way to protect ourselves against the dangers of toxic chemicals is not for companies to concentrate on better "management" techniques, but for unions and labor-community coalitions to push them to aggressively implement strategies to reduce their toxic chemical use and create cleaner and safer production processes.

II. Labor and the Environment - The Third Agenda

Traditionally, environmental issues and concerns are presented as a clash between two basic agendas or approaches.

The first agenda belongs to the companies. It is basically concerned with protecting not the environment, but the corporate bottom line. While some companies have made efforts to reduce their use of toxic chemicals, many more have tried to minimize and/or ignore the problems caused by the use and disposal of toxic chemicals. Some companies are heavy polluters that show little or no regard for the community in which they operate. Some companies may feel that because they "provide" jobs, they don't have to worry about or even pay attention to any other community concerns.

There are also many small companies which are unable to afford available pollution control technology, while others really just don't understand the regulatory picture and the environmental issues involved. Companies often band together to oppose government regulation because they feel they can't afford it; they resent being told what to do; they sometimes aren't sure how to comply; or they simply want to make as much money as they possibly can.

The second agenda is that of the environmental movement, made up of both national groups and local or community-based groups. Characteristically, these groups demand that some form of pollution be stopped. Community-based groups are often dealing with an area severely affected by the actions of one or a group of companies

spoiling groundwater, dumping in streams or polluting the air. They, above all, want the pollution halted.

In the clash between these two agendas, the needs and concerns of the workforce are often ignored. The importance of such issues as jobs, quality of work, workplace health and safety, etc., has often been lost as companies and environmentalists go head to head over specific

pollutants or over new regulation and enforcement. Even worse, in many cases, companies may look like they are the “protectors” of the jobs, against the “environmental extremist onslaught”. Working peoples’ real concerns about jobs have often been lumped in the with the company focus on profit and lack of concern for the environment, and then pitted against the real concerns about what toxic chemicals are doing to our air, our land, our water and our health. Government regulations on a state and national level have grown out of the fight between the environmentalists and the companies. They have generally been developed without a voice for the workforce, and therefore can sometimes lead even to worsening conditions in the workplace.

Part of the problem is that in comparison to workplace exposures, levels of exposure in the environment are generally pretty small. Occupational exposure guidelines set by OSHA are sometimes 1000 times less strict than those set by EPA for the public. Working people correctly see the inconsistencies in the way government protects public health. But the main issue is that workers have little or no say in how toxic exposures are dealt with, so any negative impacts generally fall on them.

So, we may see unions that aggressively stand up and fight the company in grievances and at contract time, standing by their management when faced with this assault from “outsiders”. But, what’s a union to do? Unions protect the interests of the workers and high on the list is ensuring job security. There will be no workers and no union without a company to work for. Getting beyond this stark fact in these very tough economic times has been difficult most local unions. What we need it a broad labor agenda on the environment. But what is this “third” agenda?

Some unions have formed coalitions in their communities to force their companies to be environmentally responsible. They see this as a job-preserving strategy because companies that are making investments in the plant to upgrade production and protect the environment are more likely to remain in the community. As unions, we cannot afford to leave environmental policy-making to the environmentalists alone, or to the companies. We must take the time to educate ourselves about these issues, just as we do with every other issue that affects our jobs and the quality of our lives.

We must also consider how production can be changed to make it less toxic and to thereby avoid eliminating jobs. We need an approach to production in this country, and industrial policy to support it, that keeps workers in good-paying, unionized jobs, that are safe, healthy and do not damage the environment. We have, or could develop, the technology and the tools. What we need is the political will to achieve it.

III The Massachusetts Toxics Use Reduction Act

To reduce the use of toxic chemicals in the state, the Massachusetts Toxics Use Reduction Act (TURA) was passed unanimously by both Houses of the State Legislature and signed into law in 1989. TURA is generally considered to be one of the most aggressive and innovative toxics use reduction laws in the country. While labor did not play a strong role in its passage, unions stand to benefit greatly by this law if they play a strong role in implementing it

in workplaces where they represent workers, and by working with community activists to pressure local companies to comply.

Toxics use reduction is defined in TURA as “in-plant changes in production processes or use of raw materials that reduce, avoid, or eliminate the use of toxic or hazardous substances or the generation of hazardous by-products per unit of product.”

There are six basic techniques for toxics use reduction:

- **Replacement** of a toxic chemical with a non-toxic or less toxic chemical.
- **Reformulation** of the product by substituting an existing end-product with a non-toxic or less toxic end-product;
- **Redesigning** or modernizing the production process;
- **Upgrading** or replacing equipment or methods with more effective equipment to modernize the production process;
- **Improving operations** and maintenance of housekeeping practices; product or process inspections, or production process control equipment; and,
- **Recycling, reuse, or extended use** of toxics by using equipment or methods which become an integral part of the production process.

Four government offices guide the implementation of TURA:

- The **Department of Environmental Protection** collects toxics use data and serves as a regulatory body;
- The **Office of Technical Assistance**, a non-regulatory agency, offers technical and strategic assistance to companies in reducing toxics use;
- The **Toxics Use Reduction Institute** at U.Mass./Lowell develops training programs for toxics users and toxics use reduction planners, and engages in research and development of toxics use reduction techniques; and,
- The **Administrative Council on Toxics Use Reduction** oversees the entire program’s operation.

IV. TURA Requirements for Companies

TURA requires companies to analyze their production and develop plans for toxics use reduction. Implementing strategies can mean an economic savings for the companies, increased protection for workers, and environmental benefits for all of us.

Because reducing the use of toxic chemicals often makes good business sense, the regulatory requirements of TURA are minimal. TURA is based on the principle that toxics use reduction is a “win/win/win” opportunity because it not only protects the environment, but also saves companies money and protects the health of workers. By using less toxic chemicals, a company can reduce its costs for buying, managing, and disposing of chemicals, have less costly accidents, and save money by an overall reduction in waste.

Studies by Inform, Inc., and TURI show that major reductions can be made for minimal costs that more than pay for themselves within 12-18 months. Therefore, it should be possible for unions who are well-informed about TUR to negotiate implementation of toxics use reduction practices, e.g., as contract language in health and safety clauses, or as other contractual agreements. In other instances, unions can work with community groups to convince companies to comply with the TUR law. Also, unions can use the TUR law to obtain specific information about what chemicals, toxics and manufacturing processes are being use in a workplace where union members are employed.

Specifically, TURA requires a company to file an annual Toxics Use Report (Form S) to the Department of Environmental Protection if it:

- Manufactures or processes, 25,000 pounds or more annually, or uses 10,000 pounds per year, of a TURA regulated chemical. The regulated chemicals include those listed under the Superfund and Emergency Planning and Community Right-to-Know Act.
- Employs the equivalent of at least 10 full-time employees each working a minimum of 2,000 hours a year; and,
- Conducts any business activity pertaining to the following categories: mining, fossil fuel extraction, agricultural, products, textiles, wood, paper, chemicals, plastics, leather, metal, industrial machinery, electronics, automotive, transportation, and business services.

Form S details a company’s facility-wide and process-level chemical use. The form must show total use, the by-products produced in the process, emissions, and amount of chemicals present in the product. The deadline for filing a Form S detailing the previous year’s chemical use is July 1 of each year. 1990 was the first year for which data were filed.

By July 1, 1994, each reporting company had to develop a Toxics Use Reduction plan. These plans are a tool and a guide for companies to reduce their toxic chemical use. Updates on these plans are due by August 1, 1996. Summaries of these plans are available for public examination to determine their adequacy. If at least ten citizens petition the DEP, the department will critically assess the adequacy of a company’s TUR plan. Therefore, union representatives should also take a look at companies’ TUR plans each year for information about what is being used and what steps are being taken to make the processes less toxic. Even better, unions should find ways to have a say in the development of the TUR plans themselves.

However, TUR is not always or automatically the same thing as protecting worker health and safety. While doing TUR, it is important to consider the impacts from a worker health point of view. You have to watch out, for example, for proposals that substitute flammable solvents for toxic solvents, or that create a larger problem for workers in waste treatment or recovery systems.

Many union health and safety committees have worked for years on eliminating hazardous materials from their plants. Some have contract language that binds the company to a toxic use reduction schedule for certain chemicals. Others have negotiated lower (more stringent) exposure limits than those allowed by OSHA. TUR can be a great tool for health and safety committees.

V. Toxics in Your Workplace and Community

The most recent TURA data provide toxics use information for the year 1994. 1995 data will be available after August, 1996. This toxics use data is extremely detailed and divided into different categories. Some useful terms for understanding the data are:

- **Total Use** refers to the amount of chemicals a company creates, incorporates into a product or processes.
- **Shipped in Product** refers to chemicals contained in the final product.
- **By-Product** is waste generated in production. By-Product refers to any chemical that leaves the production process as fugitive emissions in the form of evaporation losses, stack emissions, waste waters, solid waste, or hazardous waste. The by-product figures show the greatest potential for toxics use reduction.
- **Transfers and Releases** are chemicals which leave the facility either through emissions or shipping to other treatment facilities.

VI. What Do Companies Want Out of TUR?

The driving force behind TUR has always been environmental concerns and the environmental movement. Because of this, and because of the historical rift between environmentalists and the labor movement, the advocates of TUR are mostly not firmly rooted in the workplace experience, and are generally not prepared to advocate for a worker-sensitive approach to TUR. Cleaning up the environment and cleaning up the workplace environment are not necessarily the same thing. A clear and significant goal of the Toxics Use Reduction Act addresses worker safety in the face of environmental and economic decisions. However, it is up to unions to make sure that this part of the law is actually carried out, and that TUR efforts actually improve worker health and safety. It is also up to us to provide a voice for workers in decisions about TUR, in the companies where we work, in our communities, and in the state. So far, this has not always happened.

Some companies are better than others about embracing environmental protection. Many companies are saving money, becoming more efficient in their processes, positioning themselves better in the markets, and reducing compliance costs, and enjoying the goodwill of their neighbors through TUR. While many considerations, such as community image or compliance with the law might drive a company to begin a TUR project, in the end, economics play a, or the, key role in shaping the project. As with any technological change, companies will look to use TUR to cut costs and increase control over the work process. They will cost-justify TUR projects through savings in other areas, such as cutting labor costs.

When companies look to save money with TUR, they look at the cost to buy, use and dispose of chemicals. They are driven to choose the chemicals they use by cost, by availability, by the product, by customer specifications, by familiarity and tradition, etc.; not by concerns over the health or safety or environmental characteristics of the chemical.

There are many important issues about cost that unions need to understand. The first is that the costs the company talk about are not fixed. They are often set as a result of political processes that the union can be part of.

VII. A Call for Active Union Involvement

It is important that unions work together with each other and with community groups to reduce the use of toxic chemicals. Since many companies do not have the will to change their processes or approach to environmental practices, or are unwilling to change them in ways that also protect or benefit workers, and government often does not assume the authority to require such changes, it is vital for unions to take action to protect their members' health and safety in workplaces using toxic chemicals.

The Massachusetts Coalition for Occupational Safety and Health (MassCOSH), and Western MassCOSH west of Worcester, work with unions and workers to assist them in protecting workers' safety and health, and can assist unions and other groups in encouraging and negotiating with local industry to reduce their use of toxic chemicals. Unions should urge companies to share their toxics use reduction plans and to agree to abide by the suggestions of their plans. Under TURA, citizens, including workers and union members, also have the right to petition the state Department of Environmental Protection to have the DEP critically assess the adequacy of a company's toxics use reduction plan.

VIII. Toxics Use Reduction: Opportunities and Challenges

The movement for Toxics Use Reduction represents both an opportunity and a challenge for labor. The opportunity is to use TUR to help clean up our workplaces, to reduce or eliminate the exposures to chemicals that lead to over 100,000 work-related deaths a year and hundreds of thousands of disabling illnesses, and to help clean up the environment that we and our families live in. The challenge is to make TUR work in a way that actually reduces exposures on the job

while at the same time improving our job security, the quality of our jobs and the viability of our unions.

TUR is a fact of life. Toxics Use Reduction is happening. It is being forced on companies by growing environmental activism, by the rising cost of waste treatment and disposal, by a federal EPA focus on Pollution Prevention, by laws in many states which promote TUR and, in Massachusetts, by the Massachusetts Toxics Use Reduction Act. All of these together mean that practically every firm in Massachusetts, even firms which are not required to engage in TUR under the Massachusetts law, are beginning to look at it as a way to comply with environmental regulations, cut costs and avoid liability.

The issue for workers and their unions is not whether TUR will happen, but rather when and how it will happen, what it will look like and how it will affect them. In the end, the question is whether TUR will be good for workers or not. One way to think of TUR is as a form of technological change. It is a series of changes in materials, machinery, techniques and/or work organization which are designed to cut the use of particular materials, and which, in the process, will have an effect on many issues of importance to workers and unions. Unions are increasingly recognizing that it is necessary to deal with technological change before the fact, in order to protect jobs and job quality and in order to maintain strong and independent unions. The difference between positive and negative scenarios for TUR is union involvement and union action.

IX. What Can Unions Do?

TUR can be a positive force for improving our workplaces and the environment we live in. This will only happen if unions, in concert with community organizations, play an active role in defining and directing TUR. How can a union play the necessary active role?

We must start by recognizing that union involvement in discussions about TUR runs up against the tradition of Management Rights. Most union contracts have a management rights clause that specifically reserves for management the right to make all decisions about technology. Even though it can have a big effect on our lives and our unions, technology is usually developed, purchased, and implemented with little or no input from the union or the workforce.

But, because companies are under the gun about toxics, and because health and safety is an area where we have been able to make some inroads, and because they need the workforce to come up with TUR ideas and to help implement those ideas, we have some bargaining power that we may not have in other situations. In order to effectively bargain over these issues, we need a union structure which will work on them. This could be the Health and Safety Committee, a Technology Committee or some combination of these.

X. A Union Approach to Toxics Use Reduction

Although in Massachusetts Toxics Use Reduction (TUR) is a law, TUR is also a technique that can be applied in any workplace.

For the union, or health and safety committee, the goal of TUR will be clear: improving the health, safety and working conditions of members. What are the particular goals of the company in doing TUR in your plant. How do their goals fit with yours? Where are they different? If they are very different, start developing strategies to negotiate over these differences. You will probably want to discuss with the company some ground rules for the union's participation in this process, i.e., when and how contractual issues will be dealt with.

XI. It's Time to Act!

It is important to remember that it is much harder to negotiate changes after technology has been purchased or is in place. That is why we need to be involved early on in the process.

TUR is important to our future, to health and safety on the job, and to a cleaner environment for our children. But the only way it will be successful, the only way it will really improve our lives, is if there is active and informed union involvement from the beginning.

The time to act is now.

XII. A Statewide Plan for Effective, Union-friendly TUR.

MassCOSH also urges state officials to take measures to ensure effective implementation of TURA, and implementation of TURA in ways that protect and benefit workers:

- The state must complete all necessary regulations in order to begin targeting specific chemicals and lines of production for further restrictions, including the phase-out or elimination of certain chemicals which are extremely dangerous and for which safer alternatives exist. The most effective way to protect our health and our environment is to stop the production and use of certain chemicals.
- The TURA program should receive full funding. The Legislature and the Governor should reject industry lobbyists' attempts to dramatically cut the annual budget for TURA.
- The state DEP must make information and data about toxic chemical use more readily available to citizens and workers. Libraries across the state should have TURA information available via computer.

The state should deny any proposal to remove toxic chemicals from the current list of reportable substances.

We hope this booklet will introduce many new and useful ideas to you. Please call us if you want more information about TUR or if you want help getting started on a TUR plan for your workplace.

This report was principally funded by a grant from the Toxics Use Reduction Institute's "Community Education Program in Toxics Use Reduction" (CEPTUR) TURN Grants Program, University of Massachusetts/Lowell..

TUR Resources in Massachusetts

Bowdoin St. Health Center, 200 Bowdoin St., Dorchester 02122, (617)825-9800: an occupational health clinic in a community health center with a model community program to educate residents and businesses about toxics use reduction and pollution prevention in order to reduce workplace exposure to hazardous substances and improve the public health of the neighborhood. Contact: Davida Andelman

The Bureau of Waste Prevention, Department of Environmental Protection, 1 Winter St., Boston 02108, 292-5500 and regional offices in Worcester, Woburn, Lakeville, and Springfield: charged with writing TUR regulations, enforcing the law, and collecting and making data on toxic chemicals available.

Center for Ecological Technology, 26 Market St., Northampton 01060, (413) 586-7350, e-mail: johnm@cetonline.org: a non-profit organization providing education, training and technical assistance and offering toxics use reduction training for small businesses and public sector agencies.

Clean Water Fund, 36 Bromfield Street, #204, Boston, MA 02108, (617) 338-8131: a research and education organization which has promoted the public interest on environmental issues in Mass. For 13 years. Contact: Lee Ketelsen or Cindy Luppi

Massachusetts Campaign to Clean Up Hazardous Waste,. 29 Temple Place, Boston, MA 02111, (617) 292-4821; Fax: ((617) 292-8057 email: mcchw@igc.apc.org: disseminates information on toxics use and toxic health effects, and works with citizen groups concerned about toxics use in the communities. Contacts: Matt Wilson

Massachusetts Coalition for Occupational Safety and Health (MassCOSH), 12 Southern Ave., Dorchester, MA 02124, (617) 617-825-7233, fax (617) 929-0434: a non-profit organization which works closely with labor unions and workers to provide training, advocacy, technical assistance, and support around workplace health and safety for unions and workers. Contact: Marcy Goldstein-Gelb

Office of Technical Assistance, Executive Office of Environmental Affairs, 100 Cambridge St., Boston, MA 02108, (617) 727-9800: provides free consultation and technical assistance to firms attempting to implement toxics use reduction programs.

Toxics Use Reduction Institute (TURI), University of Massachusetts, Lowell, One University Avenue, Lowell, MA 01854, Phone: (508) 934-3275, Fax: (508) 934-3050: provides education and training in TUR for professionals and the general public, maintains a technology transfer center and a surface cleaning laboratory, trains TUR planners who are specially trained to help companies do planning for TUR, and sponsors research on the development of safer materials and cleaner technologies. Funded by TUR fees paid by businesses in Massachusetts. Contacts: Ken Geiser or Marie Claire Bickford.

In addition, The Administrative Coordinating Council in Massachusetts brings together representatives from seven Massachusetts state agencies that oversee environmental, health, labor and development programs. The purpose of the Council is to set policy and coordinate TURA Program activities within the various state agencies. Contact through any of the involved Massachusetts state agencies.

For more detailed information and a 35-page manual for educating union members about Toxics Use Reduction and developing a union plan and negotiating strategy for Toxics Use Reduction in your workplace, call or write for “A Union Approach to Toxics Use Reduction” to MassCOSH at the above address or phone.

For a longer report of interest to unions and health and safety committees called “Application of Toxics Use Reduction to OSHA Policy and Programs,” by Jennifer Penney, Sc.D., and Professor Rafael Moure-Eraso, Work Environment Department, University of Massachusetts, Lowell, call or write to the TURI Institute at U. Mass. Lowell.