

# Frequently Asked Questions About the Toxics Use Reduction Act

*By the Toxic Use Reduction Institute*

## **What agencies are involved in implementing TURA?**

It is a partnership between four state agencies: the Administrative Council on Toxics Use Reduction, the state Department of Environmental Protection (DEP), the Office of Technical Assistance (OTA), and the Toxics Use Reduction Institute (TURI) at the University of Massachusetts Lowell.

## **How is TURA different from the Federal TRI?**

TURA requires companies to report on their toxic chemical use, while TRI only requires companies to report their toxic chemical releases. TURA also requires companies to prepare a Toxics Use Reduction Plan, something TRI does not require.

## **What companies are required to report under TURA?**

Under TURA roughly 600 industrial facilities must report annually on toxic chemicals used and toxic byproducts generated at the facility. Each year as facility managers prepare to report toxic chemicals released to the environment or transferred off-sited under the federal TRI they must also report on the use of those chemicals under the state TURA program. Companies are required to report if they meet the following criteria:

1. Have ten or more full-time employees on staff,
2. Conduct business activities according to certain Standard Industrial Classification (SIC) codes, and
3. Either manufacture or process 25,000 pounds or more of a reportable toxic substance during the reporting year or otherwise use 10,000 pounds or more of a reportable toxic substance during the reporting year. (These companies are generally referred to as Large Quantity Toxics Users (LQTU) and usually are already required to report under the US EPA's Superfund Amendments Re-authorization Act (SARA) section 313 and/ or who use chemicals on the CERCLA list.

## **Which industries are covered?**

They include those in SIC codes 10-14 (mining), 20-39 (manufacturing), 40 and 44-49 (transportation), 50 and 51 (wholesale), and 72, 73, 75, and 76 (certain services).

## **Which chemicals are regulated?**

All of the substances on the federal Toxics Release Inventory (TRI) under Section 313 of the federal Emergency Planning and Community Right to Know (EPCRA) are regulated. Also, substances found on the federal Comprehensive Environmental Response and Compensation Liability Act (CERCLA) list are subject to TURA reporting and planning, except for chemicals that are delisted. There are over 1400 chemicals

that are subject to reporting, although only about 250 have been used and reported in Massachusetts.

### **What are the use thresholds?**

A firm must manufacture or process 25,000 pounds per year of a listed chemical, or must use 10,000 pounds per year of a listed chemical.

### **What are annual reports?**

Each covered firm must file an annual report (called a "Form S"), which identifies the listed chemicals that the firm used during the year in each production process (called a "production unit"), the percentage reduction of toxic byproducts and toxic emissions, and the TUR techniques used to reduce the wastes.

The percentage reductions are based on a base year that has been established by the firm (for most firms this is 1987, 1988, or 1989). There are two indices of reduction performance for each listed chemical. The "by-product reduction index" describes the percentage of nonproduct chemicals reduced per unit of product compared to the base year. The "emission reduction index" describes the percentage reduction of chemicals released from the plant per unit of product compared to the base year.

The TUR techniques employed to achieve these reductions are identified on a matrix supplied on the Form S.

### **How can I find out who in my community is reporting under TURA?**

Most of the companies reporting under TURA are listed in the [Reports](#) section of this web site. However, there are a few companies that may not be included because they have filed their report with a trade secret claim. If you do not see a company listed and you think they should be reporting, contact the DEP for more information.

### **How many companies report each year?**

The number of companies reporting each year varies. In the past, 600 or 700 companies reported each year; currently, that number is around 500.

### **How much chemical use and byproduct generation is reported each year?**

The amounts reported change each year. See the [Reports](#) section of this web site for more information.

### **Why do some companies stop reporting?**

If the company's use of a reportable chemical is less than the threshold reporting quantity or the company stops meeting some of the other criteria such as the number of employees, then they no longer have to report.

### **How do firms implement Toxics Use Reduction programs?**

Firms are encouraged to establish planning teams and engage the workforce in analyzing production processes, conducting materials accounting programs, auditing health and environmental regulations, and identifying TUR options. Potential options

often require thorough financial and technical analyses to assess adoption feasibility. Upper level management commitment is often key to successful implementation of TUR programs.

### **What are TUR Techniques?**

A Toxics Use Reduction Technique (TUR Technique for short) is a way for a company to reduce the amount of toxics being used and reported. There are six basic techniques for TUR defined under TURA:

Input substitution: changing the raw materials of a product to use nontoxic or less toxic raw materials.

Product reformulation: reformulating or redesigning end products to be nontoxic or less toxic upon use, release, or disposal.

Production unit redesign or modification: using production units of a different design than those used previously;

Production unit modernization: upgrading or replacing production unit equipment or methods.

Improved operation and maintenance: modifying existing equipment or methods by such steps as improved housekeeping, system adjustments, or process/product inspections.

Recycling, reuse, or extended use of toxics: by using equipment or methods that are integral to the production unit.

### **What is a toxics use reduction plan?**

After 1994 each firm must prepare a plan documenting how they will use TUR techniques to reduce the generation of wastes. Each plan must provide a corporate policy statement and two- and five-year goals for by-product reduction of each listed chemical. In addition, each plan must include information about current and projected toxic chemical use, the technical feasibility of implementing various techniques, and the economic impacts of each technique; a description of each technique or procedure that is to be implemented; and a schedule for implementation. Each plan must be certified by a state-authorized Toxics Use Reduction Planner. A planner may be either an accredited employee of the firm or a licensed consultant.

### **What is a TUR Planner?**

A Toxics Use Reduction Planner is a professional who is trained by the Toxics Use Reduction Institute and certified by the Department of Environmental Protection.

### **Why do we need such a law?**

In any community that has an industry or manufacturing company there is use of, or production of, toxic materials such as chemicals in the making of a product. Chemicals can be brought in, let's say, to the company for perhaps cleaning of metal bumpers. Chemical by-products, or products, can result. Toxic emissions and wastes are a part of the process and, in excess, can be a hazard to employees and the surrounding community. Most of us are familiar with the concept of factory smoke emissions causing breathing problems for some individuals and certain airborne chemicals in those smoke emissions breaking down the ozone layer. According to JSI's Center for Environmental

Health Studies, in 1993 Massachusetts industries used more than one billion pounds of toxic chemicals to manufacture products that we use in our homes and workplaces. Among the toxic chemicals used in our state during that year were 543 million pounds of chemicals that have been found to cause chronic health effects involving lungs, liver, or kidneys when people are exposed over a long period of time. By reducing the use and thereby the amount of toxic materials used, the number of problems caused by toxics can be reduced.

### **What is the Massachusetts government doing to promote TURA?**

The Commonwealth is required to promote the state law through four institutions: the Administrative Coordinating Council, the Department of Environmental Protection, the Bureau of Waste Prevention, the Office of Technical Assistance, and the Toxics Use Reduction Institute.

The Administrative Coordinating Council brings together representatives from seven state agencies that oversee environmental, health, labor, and development programs. The purpose of the council is to establish more coordinated approaches promoting industrial development that is environmentally sound and enhances human health. The Council is assisted by an Advisory Committee made up of members of the public and the business community.

The Bureau of Waste Prevention is a reorganized unit within the state Department of Environmental Protection charged with writing regulations, enforcing the law, and collecting and making data available.

The Office of Technical Assistance in the Executive Office of Environmental Affairs provides free technical consultation and assistance to firms attempting to implement TUR programs.

The Toxics Use Reduction Institute at the University of Massachusetts Lowell provides education and training in TUR for professionals and the general public, conducts a technology transfer program, and sponsors research in the Development of safer materials and cleaner technologies.

### **Why don't byproduct + shipped + released = total use?**

When you look at the TURA reports, you may notice that the quantities for manufactured + processed + otherwise used add up to equal total use. However, the quantities for byproduct + shipped + released do not add up to equal total use. There are a number of reasons for this; they are listed in the section entitled [Why Don't the Inputs Equal the Outputs?](#)