

# **Toxic Use Reduction in Washington State: An Examination of the Massachusetts TURI Approach**

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## **The Issue**

Many different chemicals, some in large quantities, are used by business, hospitals, agriculture, and residents of Washington State. While chemicals are an essential part of our society, there are legitimate concerns about adverse effects on human and environmental health.

To address concerns about some of the hazardous chemicals, the Department of Ecology and Health are developing policies to address persistent bioaccumulative toxics (PBT)<sup>1</sup>. The rule requires the development of a chemical action plan for each chemical on the PBT list. This is a slow process and does not address the many chemicals actively in commerce.

A program on chemical use reduction has several goals. First, is to develop a program that provides positive incentive and proactively works to facilitate the reduction in the use of toxic chemicals. This would be accomplished by substitution of less toxic alternatives and changes in processes. Second, facilitate a positive environment that encourages business in Washington State. Third, promote the highest environment and human health standards.

The following summarizes a program sponsored by the state of Massachusetts.

## **Toxics Use Reduction Institute (TURI) - University of Massachusetts Lowell**

### **Overview:** Toxics Use Reduction Institute (TURI)<sup>ii</sup>

“The Institute (TURI) researches, tests and promotes pollution prevention methods and alternatives to toxic chemicals used in Massachusetts industries and communities. Located at the University of Massachusetts Lowell, TURI is part of the State's TURA program.”

### **Mission**

- Research, test and promote alternatives to toxic chemicals used in Massachusetts industries and communities
- Provide resources and tools for a safer place to live and work
- Promote economic competitiveness through improved efficiency, compliancy stability and reduced risk

### **Establishment and location**

“TURI was established at the University of Massachusetts Lowell by the [Toxics Use Reduction Act \(TURA\)](#)<sup>iii</sup> of 1989.” This bill established TURI as an institute at the

University of Massachusetts Lowell, located about 25 miles northwest of Boston Massachusetts. An important part of the mandate was to develop curriculum and programs to educate students and the public about the feasibility of toxic use reductions. In 2004 the University of Lowell established the School of Health and Environment<sup>iv</sup>.

### **Main Programs**

- Industry

The industry programs include research, technology support and training for reducing the use of toxic chemicals and development of alternative approaches. They have specific programs for coated wire and cable, electronics, metal finishing, biotech, nanotech, and small business sectors.

- Communities

TURI sponsors a Community Grant Program that encourages Special Community Projects related to worker training, small business projects, and sustainable products in neighborhoods (SPIN).

- Government

“Policy research assesses, develops, and evaluates specific initiatives that public agencies can implement to reduce the use of toxic chemicals and the generation of toxic byproducts by industry and communities.” TURI works to coordinate efforts across various government departments.

- Toxic Chemicals

The TURA legislation states that “The department shall identify all department requirements for reporting on chemical use, release and disposal, and to the maximum extent possible, shall standardize, consolidate and coordinate these reporting requirements to minimize unnecessary duplication.” From this TURI appears to develop a list of priority chemicals and establish target use levels and reduction programs. TURI maintains a data base of chemicals used in Massachusetts.

- Alternatives Assessment

TURI has a strong research and consultation program to help businesses use or develop alternative approaches to the use of toxic chemicals.

- Training and Library

TURI runs a strong training program that includes seminars, conferences, class room curriculum and continuing education. These efforts are supported by a library, data bases, and web site.

### **Staffing and Budget**

According to the staff list on the TURI web site there is 17 staff. There was not budget information but with 17 staff the budget would be at least \$2 million.

### **Funding TURI**

TURI is funded by fees companies pay for listed toxics use above a certain threshold. The fees are based on the size of the company and use of toxic chemicals<sup>v</sup>. This has the advantage of encouraging companies to reduce their use of listed chemicals and thus their fees paid to TURI.

State organizations that collaborate with TURI include the Massachusetts agencies are the Office of Technical Assistance and the Department of Environmental Protection (regulatory arm, although they also do many other programs than toxics use reduction).

### **Areas that could be strengthened**

Areas that could be strengthened relate to broader policy consideration such as the evaluation of the economic arguments for reduction of the use of toxic chemicals and as well as the costs and benefits to society. For example, there could be a focus on child health related issues and associated health related cost due to chemical exposures. In addition it would be appropriate to address the ethical and social implications and arguments for the reduction of toxic chemicals.

### **Next Steps for Washington**

Develop white paper that examines the options for and feasibility of setting a TURI like organization in Washington State. This would include funding issues, location, housing in existing State University or as an independent organization, as well as organizational and program structure that would best address WA needs.

Establish an advisory / review committee that would include stakeholder from business, government, academics, public health professionals, environmental organizations and the public, with appropriate consideration of conflict of interest issues.

Seek funding for developing the white paper (\$10-15,000) and identify appropriate and willing funder. This would include research, meeting with stakeholders, coordinating stakeholder and advisory group meetings, writing the report, and distribution.

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<sup>i</sup> PBT Rule Development. Washington State Department of Ecology. (<http://www.ecy.wa.gov/programs/eap/pbt/>).

<sup>ii</sup> Toxics Use Reduction Institute (TURI) TURI/University of Massachusetts Lowell, Lowell, Massachusetts (<http://www.turi.org/>).

<sup>iii</sup> Toxics Use Reduction Act (TURA) 1989 Massachusetts (<http://www.mass.gov/legis/laws/mgl/gl-21i-toc.htm>).

<sup>iv</sup> University of Massachusetts Lowell the School of Health and Environment. (<http://www.uml.edu/College/she/>).

<sup>v</sup> CHAPTER 21I. MASSACHUSETTS TOXICS USE REDUCTION ACT. Chapter 21I: Section 19 Establishment of Toxics Use Fee (<http://www.mass.gov/legis/laws/mgl/21i-19.htm>).