



## Lowell Center for Sustainable Production

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# Precautionary Chemicals Policy Initiatives in the United States

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Today, there are many innovative and precautionary initiatives on chemicals and environmental health policy being put forward and implemented in the United States at the national, state and regional levels. Listed here are several of the more innovative initiatives.

### *National*

#### **Persistent Bioaccumulative and Toxic (PBT) Chemical Strategy**

<http://www.epa.gov/pbt/aboutpbt.htm>

The U.S. Environmental Protection Agency (EPA) has developed a strategy for the management of persistent, bioaccumulative and toxic (PBT) substances. The EPA has established an agency-wide system that addresses the cross-media issues associated with priority PBT pollutants in waste streams. Reporting thresholds under the national Toxics Release Inventory reporting system for PBTs used in manufacturing processes have been lowered. In addition, the EPA has established precautionary guidelines for chemical manufacturers to avoid bringing new PBTs to market and Internet-based tools to assess chemicals for their potential persistence and capacity to bioaccumulate. The EPA is currently working on priority PBTs such as mercury and dioxins for reductions.

#### **High Production Volume Chemical Testing Production**

<http://www.epa.gov/chemrtk/>

The U.S. Environmental Protection Agency, Environmental Defense (an environmental advocacy organization) and the American Chemistry Council entered into a voluntary agreement in 1999 to produce screening level data on 2800 High Production Volume (HPV) Chemicals. Companies enter into consortia to provide this data. Results of the program have been mixed. While the program is likely to generate a good set of screening level data for most of the HPV chemicals which the EPA is putting up on the Internet, the EPA is still debating what to do with the data (risk management).

## *California*

### **San Francisco Precautionary Principle Ordinance**

[http://www.sfgov.org/sfenvironment/aboutus/policy/legislation/precaution\\_principle.htm](http://www.sfgov.org/sfenvironment/aboutus/policy/legislation/precaution_principle.htm)

In June 2003, the San Francisco City Council passed an ordinance making the precautionary principle the guiding principle of environmental policy in that city. It is the first time the precautionary principle has been enacted into municipal law in the United States. The San Francisco Department of Environment is integrating precautionary considerations into the city's purchasing policies by choosing only the safest alternatives for specific product categories – such as cleaners, pesticides, etc.

### **PBDE Ban in California**

[http://info.sen.ca.gov/pub/bill/asm/ab\\_0301-0350/ab\\_302\\_bill\\_20030724\\_enrolled.html](http://info.sen.ca.gov/pub/bill/asm/ab_0301-0350/ab_302_bill_20030724_enrolled.html)

In July 2003, the California legislature passed restrictions on the use of polybrominated diphenyl ethers (PBDE) as flame retardants in commercial products. The law states “on and after January 1, 2008, a person may not manufacture, process, or distribute in commerce a product, or a flame-retarded part of a product, containing more than one-tenth of 1 percent of pentaBDE or octaBDE, by mass.”

### **Proposition 65 in California**

<http://www.oehha.org/prop65/law/P65law72003.html>

In 1986, California passed a referendum entitled the Safe Drinking Water and Toxic Enforcement Act, which prohibits businesses from discharging chemicals with carcinogenic or reproductive toxicity effects into sources of drinking water. Businesses must also provide clear warning to individuals exposed to these chemicals by activities of the business. The Act is enforced by citizen suits. This right-to-know law has reduced emissions of some toxics and has caused some phase-outs of chemicals from consumer products. The law also included a rapid risk assessment provision whereby hundreds of chemical risk assessments were performed in a two year period of time.

## *Washington*

### **Washington State PBT Policy**

<http://www.ecy.wa.gov/programs/eap/pbt/pbtfaq.html>

In 1998, the Washington Department of Ecology announced a state-wide phase out policy on persistent, bioaccumulative and toxic (PBT) chemicals, with the goal of eliminating PBT pollution. The program has designated nine PBTs, and included 13 more in the “PBT Working List” of chemicals on which to focus in future action plans. The Department has chosen to initially focus on mercury, and has created a draft Action Plan (August 2002), which emphasizes outreach, education, monitoring, research, and voluntary initiatives. The next Action Plan will be on dioxin.

## ***Massachusetts***

### **Massachusetts Toxics Use Reduction Act**

<http://www.turi.org>

Passed in 1989, the Toxics Use Reduction Act is one of the most far reaching pieces of chemicals legislation in the world. The law requires that manufacturing firms using more than 10,000 pounds per year of some 1200 substances annually undertake a full materials accounting exercise (data from which are publicly available) and every two years undertake a comprehensive plan to identify and evaluate process and product alternatives that would reduce reliance on and waste from toxic chemicals. Since 1990, the law has resulted in an 80% reduction in chemical emissions, a 57% reduction in chemical waste, and a 40% reduction in chemical use with an estimated net savings of USD\$14 million. Companies pay a fee on chemicals that supports the regulatory program as well as two voluntary technical assistance, research and training centers.

### **Act for a Healthy Massachusetts**

<http://www.state.ma.us/legis/bills/st01268.htm>

Building on the successes of the Toxics Use Reduction program and the REACH initiative, a group of scientists, public health advocates, labor unions and environmental advocates developed a bill that would require substitution of 10 priority chemicals where safer alternatives exist. This broad coalition – called the Alliance for Healthy Tomorrow ([www.healthytomorrow.org](http://www.healthytomorrow.org)) was formed to develop precautionary policies to address toxic substances.

## ***Great Lakes Region***

The Great Lakes region has always been a centerpiece of evidence on the health and ecosystem impacts of toxic substances – from pesticides and egg shell thinning in eagles to polychlorinated biphenyls and cognitive disabilities.

### **Great Lakes Water Quality Issues and the International Joint Commission (IJC)**

<http://www.ijc.org/ijcweb-e.html>

The United States-Canada International Joint Commission was established by the 1909 Border Waters Treaty. In the late 1990's the Commissions Science Advisory Board recognized the health and ecosystem impacts of pollution from persistent chemicals and called for a phase out of such chemicals in the region as the most effective way to protect the region from further impacts.

### **Great Lakes Water Quality Agreement of 1978**

<http://www.epa.gov/glnpo/glwqa/1978/index.html>

The Agreement, first signed in 1972 and renewed in 1978, expresses the commitment of Canada and the U.S. to restore and maintain the chemical, physical and biological integrity of the Great Lakes Basin Ecosystem and includes a number of objectives and guidelines to achieve these goals. In 1987, a Protocol was signed amending the 1978 Agreement. The amendments aim to strengthen the programs, practices and technology described in the 1978 Agreement and to increase accountability for their implementation. Timetables are set for implementation of specific programs.. The Agreement calls for the virtual elimination of persistent and bioaccumulative pollution in the region. Annexes address atmospheric deposition of toxic

pollutants, contaminated sediments, groundwater, and nonpoint sources of pollution. Other annexes incorporate the development and implementation of remedial action plans for Areas of Concern and lakewide management plans to control critical pollutants.

**Great Lakes Binational Toxics Strategy**

<http://www.epa.gov/glnpo/p2/bns.html>

The Great Lakes Binational Toxics Strategy is a joint U.S.-Canada effort to virtually eliminate persistent toxic substances resulting from human activity in the Great Lakes Basin. This effort designates a list of Level I and Level II PBTs and calls on both countries to make efforts to phase out use and production of these chemicals nationally and in the Great Lakes area. These phase outs are to be implemented through voluntary efforts.