

Massachusetts  
Department  
of  
ENVIRONMENTAL  
PROTECTION

## fact sheet

# 2002 Toxics Use Reduction Information Release

Each year, the Department of Environmental Protection (DEP) issues an annual report on the use of toxic chemicals in Massachusetts. The 2002 report shows that under the Toxics Use Reduction Act, major chemical-using facilities continue to reduce their reliance on toxic chemicals, maintaining Massachusetts' status as a national leader in reducing toxic chemical use and waste.

In 2002, the total 2002 TURA universe (653 facilities) reported the use of 191 listed toxic substances under the Toxics Use Reduction Act (TURA). In total, these facilities reported:

- 1.2 billion pounds of toxic substances used (down from 1.3 billion pounds in 2001),
- 106.1 million pounds of byproduct (or waste) generated (down from 112.8 million pounds in 2001),
- 343.3 million pounds of toxics shipped in or as products (down from 376.8 million pounds in 2001),
- 7.8 million pounds of toxics released to the environment (down from 8.9 million pounds in 2001), and
- 34.3 million pounds of toxics transferred off-site for further waste management (down from 35.5 million pounds in 2001).

The reported data shows that very little chemical manufacturing occurred in Massachusetts (only 6% of total use), and a significant amount of this chemical manufacture was incidental to some other industrial process (e.g., acid gases created from fuel combustion at power plants). Most of the reported chemicals used (about 62%) were incorporated into a product (such as plastics, paints, automotive parts, etc.). About 32% of chemical use was attributed to uses ancillary to production processes, such as parts cleaning and waste treatment.

TURA progress has historically been measured by using data (excluding trade secret data) normalized for changes in production that is reported by a Core Group of TURA industries that were subject to reporting in 1990 and continue to report today. Originally, the 1990 Core Group represented nearly 100% of TURA chemical use. However, because certain chemicals and industry groups were added to the TURA program after 1990, the 1990 Core Group now represents only about half of the current reported toxics use. Therefore, a new 2000 Core Group has been created to more accurately represent progress within the TURA reporting universe from a 2000 baseline year.

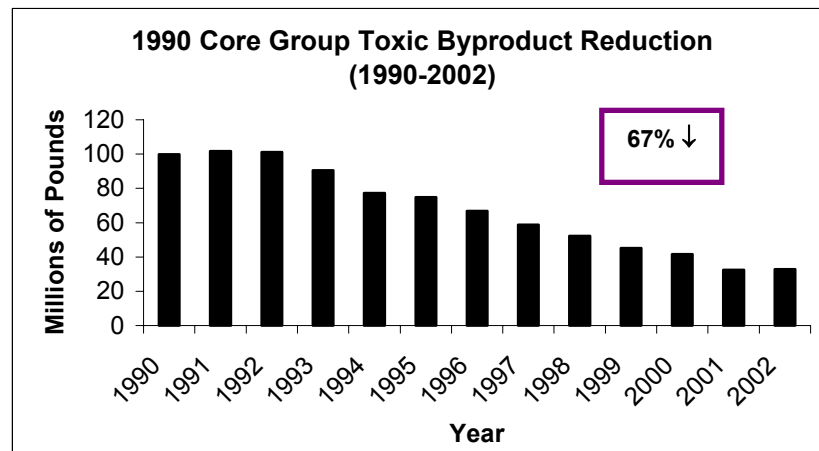
In 2002, the **2000 Core Group** used 989 million pounds, or 99% of the total toxic chemicals reported (i.e., 1 billion pounds excluding trade secret data). Adjusting the data to account for a 10% decrease in production from 2000 to 2002 over that two-year period, the 2000 Core Group facilities reduced:

- toxic chemical use by 6%,
- toxic byproducts by 9%,
- quantities shipped in product by 14%,
- on-site releases to the environment by 21%, and
- transfers off-site for further waste management by 17%.

2002 was the third year TURA facilities reported on chemicals now classified as persistent bioaccumulative toxic (PBT) chemicals by the U.S. Environmental Protection Agency (EPA) under the Toxics Release Inventory (TRI) Program. The use and release of PBTs and other highly hazardous substances have received increasing attention in recent years. PBT chemicals are of special concern because they are highly toxic, remain in the environment for long periods of time, are not readily destroyed, and build up in the food chain. The most widely reported PBTs are polycyclic aromatic compounds, benzo(g,h,i)perylene, lead, and lead compounds.

For comparison with previous reports that focused on the 1990 Core Group, the **1990 Core Group** used 532 million pounds in 2002, or 53% of the total toxic chemicals reported (i.e., 1 billion pounds excluding trade secret data). Adjusting the data to account for a 22% increase in production from 1990 to 2002, over that 12-year period the 1990 Core Group facilities reduced:

- toxic chemical use by 42%,
- toxic byproducts by 67%,
- quantities of toxics shipped in product by 58%,
- on-site releases of toxics to the environment by 92%, and
- transfers of toxics off-site for further waste management by 54%.



TURA requires reporting facilities to develop toxics use reduction plans that identify and evaluate opportunities to reduce the use of toxics and the generation of toxic byproducts. These plans must be updated every two years and approved by a state-certified toxics use reduction planner.

In addition to DEP's administration of reporting and planning requirements, the TURA program is supported by the [Office of Technical Assistance \(OTA\)](#) and the [Toxics Use Reduction Institute \(TURI\)](#). OTA provides non-regulatory technical assistance to facilities seeking to reduce the use of toxics, develops fact sheets and other technical guidance documents, supports the development of technology solutions by leveraging state and federal funding, and creates market-based incentives for qualifying TURA filers. TURI provides toxics use reduction education, training, and library services; supports research on cleaner materials and processes; and operates a laboratory for testing non-toxic or less-toxic cleaning alternatives.

The 2002 Toxics Use Reduction Information release contains important chemical information that is useful to the public, government, and industry. However, it is important to note that the data in these reports is collected only from facilities within certain industrial sectors that have ten or more full-time employees and that use chemicals above established reporting thresholds. Therefore, these reports do not provide a complete picture of the use and release of all chemicals. In addition, these reports do not contain information about exposures of the public to reported chemicals.

DEP's 2002 Toxics Use Reduction Information Release is available at [www.mass.gov/dep/bwp/dhm/tura](http://www.mass.gov/dep/bwp/dhm/tura). TURI also makes TURA data available on its website in a user-friendly way that is searchable by community, chemical, or company. See [www.turi.org/turadata](http://www.turi.org/turadata). For further information, please visit the web sites listed here, or call the DEP TURA program at 617-292-5711.

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