



Toxics Use Reduction Report

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Purpose

The Toxics Use Reduction (TUR) program was created by the Maine State Legislature to reduce the amount of toxic substances introduced annually into Maine's environment. This reduction in toxics protects public health and safety and leads to better environmental stewardship.

The purpose of this report is to describe the current status of the TUR program as required under Maine's Toxics Use Reduction Law at 38 MRSA, §2309, sub-§9, address whether benchmarked goals set by the Legislature have been met, and to make recommendations for going forward with the TUR program.

Background

The Maine Department of Environmental Protection (DEP) was given authority to implement the State's TUR program through legislation enacted by the 114th Legislature. Public Law 1989, chapter 929, "An Act to Clean the Environment by the Reduction of Toxics Use, Waste and Release" was enacted in April 1990.

This initiative required mandatory toxics reductions, progress reports, pollution prevention plans and the payment of program support fees. Mandatory toxics reduction goals spanning the years 1994 to 1998 were as follows:

- 10% reduction by 1994
- 20% reduction by 1996
- 30% reduction by 1998

TUR's first phase was significant as it began the outreach and education effort regarding alternative methods to reduce toxics and hazardous waste by industrial facilities. Educating the regulated community on pollution prevention including reducing, recycling/reusing chemicals, and the evaluation of "process mapping" started a more organized and concerted reduction effort by Maine's industry. By the end of the authorization of the first TUR program in 1998, it was apparent there was more work to be done around pollution prevention including the need to instruct and educate more industrial facilities and achieve even more significant toxics reductions.

In May 1999, the 119th Legislature passed Public Law 1999, chapter 348 "An Act to Encourage Continuous Improvement in Pollution Prevention in Maine." This legislation is the current authority under which the DEP now operates its present TUR program.

The current TUR program differs from its predecessor in that the regulated industrial facility sets *voluntary* reduction goals towards an overall state-set benchmark reduction goal. The affected industrial facility regularly calculates and reports progress towards those reductions to DEP. Although reductions are defined as voluntary in the legislation, the facilities are expected to strive to reach the state-set benchmark goals as follows:

- Goal #1 = 40% reduction from a baseline set at 1990 levels by 2002
- Goal #2 = 50% reduction from a baseline set at 1990 levels by 2004
- Goal #3 = 60% reduction from a baseline set at 1990 levels by 2006

The transparency of data was another requirement brought about by the 1999 legislation. Making data readily available to the public was thought to better encourage facilities to meet the benchmark goals. Reports are posted on the DEP's TUR website making them publicly available. This visibility was a significant and important addition to the program's effectiveness. Pollution prevention planning and the payment of annual program support fees to DEP were also continued.

Additionally, it should be noted that facilities were no longer eligible to file for blanket exemptions (which was allowed in the previous program) but were only exempt from the program requirements if they met one of fourteen exemptions listed within the law. There was also now DEP follow-up on late reporters and late fee payment requirements. For the first time, the DEP could also legally implement enforcement actions to insure adherence to the TUR program requirements.

Status of Current TUR Program

To date, none of the regulated community entities has reached the required state-set benchmarks for 60% reductions by 2006 in any of the three categories defined by the TUR program. The following are the actual reductions to date by category:

Toxic Use (Extremely Hazardous Substances)
48,827,883 pounds reduced from the base year of 1990
18 % reduction achieved at present

Toxic Release
8,790,922 pounds reduced from the base year of 1990-91 (averaged)
47 % reduction achieved at present

Hazardous waste
7,052,947 pounds reduced from the base year of 1987/89 (averaged)
55 % reduction at present

Program Accomplishments

There have been notable program accomplishments to date including:

- Significant reductions at existing facilities in the toxic release and hazardous waste categories as demonstrated above.
- Continued success with outreach and education particularly to smaller facilities without full-time environmental staff and in need of greater technical assistance. Outreach examples include assisting smaller companies

in switching from toxic cleaners and solvents to less hazardous or non-hazardous chemicals.

- Implementation of cost accounting (comparing the costs of utilizing toxic chemicals and generating hazardous waste with the economical benefits of reducing such use and generation) has also been one of the more successful tools utilized along with introducing worker safety concepts that reduce worker exposure to toxics.
- An emerging opportunity in the TUR program to track new toxics coming into the marketplace and to utilize the technical assistance tools adapted by DEP staff to address them. Some of these technical assistance tools include: process mapping, safer chemical substitution, and pollution prevention techniques that can make further reductions in other non-regulated classes of chemicals of concern, particularly those currently or soon-to-be used in widespread commercial and residential sectors.

Recommendations

The current legislative session reviewed the report of Governor Baldacci's Task Force to Promote Safer Chemicals in Consumer Products (the "Task Force") which set forth a number of specific recommendations. Several safer chemical initiatives were introduced to this session including one that was introduced by the Governor's Office. The Task Force recommendations and legislative initiatives are opportunities to explore how the TUR program would continue its mission of continual improvement to more responsible chemical use and reduction of chemicals of concern in the marketplace.

Other toxics initiatives being undertaken by various government agencies include the DEP's Maine Air Toxics Initiative (MATI) and international initiatives such as the European Union's Registration, Evaluation, Authorization and Restriction of Chemicals (REACH). These initiatives may provide additional opportunities for TUR to promote and work with other initiatives in a more coordinated and effective manner.

In addition to the above reasons, because the TUR program has yet to reach its state-set benchmark goal of a 60% reduction in toxics use by 2006, and due to the various safer chemical initiatives introduced in this legislative session, it is recommended that the TUR program continue as it is currently structured until an appropriate and equally effective alternative effort can be determined.

The authority to continue the current program rests with the TUR law which states that following an evaluation of the program, "at the expiration of the time periods for the goals established under this subsection, the commissioner shall repeat the process."¹

¹ 38 MRS §2309

Other Considerations for TUR Program Improvements

Regarding the continuation of the TUR program over the next year and considering a recognized need to improve the functionality of the program, the following considerations are proposed:

- Improve data collection analyses resulting in increased accuracy of the data by:
 - Converting data into a direct electronic feed into the TUR database from the Maine Emergency Management Agency (outside of DEP) and the Resource Conservation and Recovery Act program (at DEP);
 - Changing timelines of reports and fee submission deadlines to increase data quality assurance;
 - Evaluating threshold requirements for the regulated community;
 - Better populating progress reports; and
 - Changing the flat base year for all 3 programs and evaluating a more current base year.

- Transparency of TUR Data -

An important aspect of the TUR program's effectiveness is the transparency of the data to the general public. A significant driver for continual improvement by facilities reporting to the program is the visibility of the data to the public who then have direct access to toxic and hazardous waste data possibly affecting their health and general quality of life.

Opportunities to increase the transparency of the data involve simplifying the data feed into the program in a manner that is truly representative of the potential risk factors, i.e. reporting of unadjusted data (direct emission and generation not adjusted to production) in all categories, and perhaps annual submission of unadjusted data thereby making the tracking and understanding of the data increasingly more comprehensible to the average citizen.

- Additional Program Considerations -

- Identifying new or existing high priority chemicals that might exist both in the industrial and consumer supply chain that could be brought under a TUR-like reduction program;
- Expanding our efforts to provide increased technical assistance such as expanding pollution prevention planning and environmental management system facilitation;
- Improving our understanding of the REACH program including their identification of chemicals of high concern, their goal to move chemicals of high concern out of commerce and the potential for business trade transaction disruptions for Maine business using internationally identified chemicals of high concern; and
- Providing greater education and outreach to consumers.