

EXAMPLES OF TUR OUTCOMES

Benefits Experienced by Massachusetts
Companies

Rich Bizzozero

Stainless Steel Coatings

Reduced the use of xylene by 57%

Eliminated the use of hexavalent chromium

Saved more than \$15,000 per year in reduced waste disposal costs.

Reduced hazardous waste generation by 52%

Reduced energy costs by 20-25%

Saved 14,500 pounds of CO2 emissions per year



Shawmut Corporation

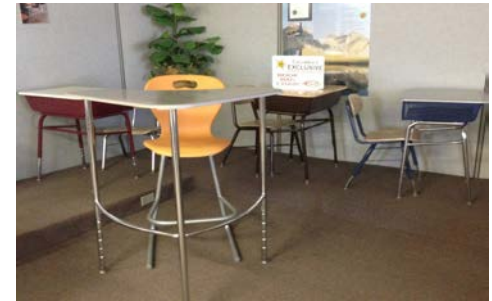
- Saved \$1.75 million as a result of process improvements and efficiencies
- Eliminated the use of TCE by more than 431,000 pounds per year by:
 - Implementing a TCE carbon adsorption system to capture emissions
 - Extracting VOC's from products
 - Improving clean-up operations
 - Substituting a less toxic and hazardous hot melt adhesive process



“I want to thank the TURA program and especially OTA, for assisting Shawmut throughout this process. OTA worked alongside us to identify safer alternatives to TCE and provided guidance on the changing face of compliance here at Shawmut, including guiding our status change from a large-quantity generator of hazardous waste to a very small-quantity generator and assisting with our petition to eliminate our EPA Title V Operating Permit.”

-Kevin Souza, Regulatory Compliance Manager for Shawmut Corporation

Columbia Manufacturing



Toxics Use Reduction Results

Recover 98%
of the plating
bath nickel
and
chromium
chemistry

Implemented
a closed loop
system to
recover water
and chemistry
(\$4 million
expense)

Saved \$3.0
million in
water and
sewer fees
since 2001

Saved \$3.85
million in
nickel and
purchases
and usage

Franklin Paint



- Eliminated Annual Use of
 - 100,000 pounds of lead compounds
 - 100,000 pounds of chromium compounds
 - 150,000 pounds of methanol
 - 50,000 pounds of xylene
 - 500,000 pounds of toluene
- Created an Integrated Contingency Plan
- Improved Worker Health and Safety by Adding a New Delivery System for Calcium Carbonate

Mark Richey Woodworking

Annual Reductions in Toxics Use and Emissions

- 120 fewer gallons of lacquer thinner, acetone and NM&P Naptha
- 1,200 fewer gallons of denatured alcohol
- 12 tons fewer VOCs used in coatings

Annual Cost Savings

- \$3,235 savings due to maintaining hazardous waste generator status
- \$13,200 savings due to reduced chemical purchases

Methods

- Solvent Recycling
- Prioritizing Water Based Coatings
- Ultrasonic Gun Cleaning
- Efficient Practices

