THE MASSACHUSETTS TOXICS USE REDUCTION INSTITUTE

Toxics Use Reduction Continuing Education Programs

The Toxics Use Reduction Program

The Toxics Use Reduction (TUR) Program, a proactive environmental program established under Massachusetts law in 1989, promotes cleaner and safer production in industrial activities. The program seeks to reduce industrial facilities= toxics use and toxic waste generation while sustaining and promoting Massachusetts industries= capacity to grow and prosper.

Under the TUR Program, industrial facilities are required to review their processes in order to identify and document toxics use reduction opportunities.

Toxics Use Reduction Planners

Certified TUR Planners oversee the activities that facilities undertake to identify and document toxics use reduction opportunities. The TUR Planners are certified by the Massachusetts Department of Environmental Protection. Prerequisites for certification include industry experience and/or successful completion of a TUR Planners course offered by the Toxics Use Reduction Institute (TURI) and a written examination.

A crucial function of TUR Planners is to assist facilities in writing the TUR Plans required by the TUR Program. A TUR Plan documents a facility=s toxics use, hazardous waste generation, and production levels. It also identifies process-specific toxics use reduction opportunities and describes projects investigated to improve environmental performance. A TUR Planner must then certify that the information in the TUR Plan is complete and that the facility will implement feasible process modifications that reduce or eliminate the use of toxics.

Continuing Education for TUR Planners

The Toxics Use Reduction Institute (TURI), a non-regulatory research and policy organization located on the campus of the University of Massachusetts Lowell, is mandated to provide continuing education for the TUR Planners. Continuing education courses are vital to ensuring the continued success of the TUR Program by helping TUR Planners stay current on technical and managerial tools for reducing the use of toxics.

TURI has offered a wide variety of TUR continuing education courses, seminars, and workshops since 1991. While these sessions are primarily aimed at TUR Planners, attendees have also included representatives from industry, government, communities, and academia.

TURI=s continuing education courses are designed to be learner-centered and participatory. This approach encourages participants to be actively involved and to bring their ideas and workplace experience into the classroom. The format of these courses may include panel discussions or presentations, but they do not follow a traditional classroom lecture model. Particular sessions may include participant discussions of case studies and small group exercises.

TURI works with a variety of instructors to develop and deliver the TUR Planner continuing education courses. In particular, TURI has sought to build instructional capacity within Massachusetts industry by cultivating TUR planners to train their peers. Instructors are also drawn from the TUR Program, government agencies (federal, state, and local), universities, and the private sector.

TURI has provided continuing education courses to TUR Planners on the topics listed below. In general, courses consist of 3- or 6-hour sessions offered during a one- or two-day conference organized by the Institute. Session titles are indicated by italics.

Toxics Use Reduction Planning

Understanding What the TUR Program Requires:
Process Characterization and Materials Accounting
Choosing Your AUnit of Product@
Math and Chemistry for Process Assessment
What=s Your AByproduct Reduction Index@?
Making Sense of Form S Reporting
TUR Planning Case Studies
What Changes in the TURA Program Mean to TUR Planners

Regulatory Context of the TUR Program:
The Integration of TURA and OSHA Regulations
Health & Safety Issues and TUR
Using TUR to Comply with the Clean Air Act

Strategies for Implementing TUR:
Changing Management Attitudes: Communicating Strategic Business Advantages of TUR
Examples of Overcoming TUR Implementation Challenges
In-house Team Building for TUR

Improving TUR Planning:
Using Internet Resources to Discover New TUR Options

Software Tools for Enhancing TUR Planning
Classic Planner Dilemmas
Cost and Financial Analysis for TUR Planning
Peer Mentoring Program for TUR Planners

Environmental Management Systems and TUR:
Environmental Management Systems Design
ISO 14000
TUR and ADesign for the Environment@: Industry Initiatives
Making Design for the Environment a Reality
Current Thinking on Green Management; TUR and Total Quality Environmental Management
Best Management Practices - TUR Lessons Learned
Indicators of Sustainability for TURA Facilities

TUR Opportunities in Specific Industries or Processes

Surface Cleaning Industry:
Precision Cleaning
Testing and Evaluation of Cleaners and Degreasers
Cleaning Process Changes: Implementation, Financial and Regulatory Considerations
Case Studies in Solvent Substitution for Industrial Cleaning
TURI=s Surface Cleaning Laboratory Database of Cleaning Trials

Electroplating and Metal Finishing Industry:
New TUR Options for Electroplaters and Surface Finishers
Closed Loop Acid Recycling
Metal Fluid Use in Metal Finishing and Fabrication

Electronics Industry:
TUR Practices and Promises in Medical Products
TUR in Printed Wiring Board Manufacturing

TUR in Other Industries:
Courses focusing on TUR in the surface coating, chemical and polymer, paper and pulp, plastics, and textile industries

Other TUR Opportunities

Energy and TUR:
Environmental Aspects of Electric Utility Deregulation Energy Efficiency and TUR: Applying TUR Techniques for Energy Conservation

Energy Efficiency in Pumping Systems
Energy Efficiency in Motors Management

TUR and Communities:
TUR and the Community: Perspectives of Community Groups, Municipalities and Schools Using TUR Data