TURI
TOXICS USE REDUCTION INSTITUTE
UMASS LOWELL
Toxics Use Reduction Institute Newsletter

September 2016

TURI Awards Grants to Reduce the Use of Toxics Across Massachusetts

TURI awarded $166,000 in grants to reduce the use of percholorethylene, flame retardants and other toxics used across Massachusetts.

The grantees will reduce toxics by re-formulating products, substituting safer materials or changing processes.

Safer laboratory products
UMass Lowell research faculty are partnering with Siemens Healthcare Diagnostics in Norwood to test new compounds made from sugar and pectin to use in immunoassay lab products. The research project aims to replace octylphenolethoxylates, surfactants that are listed by the European Chemicals Agency as substances of very high concern.

Safer wastewater pretreatment
Twin Rivers Technologies in Quincy, a producer of fatty acids used in food, textiles and detergents, will replace sodium hydroxide with a safer alternative by implementing a new wastewater pretreatment system. The company will purchase and install new equipment and conduct a demonstration for other Massachusetts companies.

Eliminating Flame Retardants in Gyms
Silent Spring Institute of Newton will work with a gymnastics studio to replace flame retardant foam pit cubes with non-flame retardant foam. Silent

Spring Institute will measure the change in exposure of flame retardants in gymnasts. The findings, including fire

Upcoming Events

Continuing Education Conference
November 15, 2016
Sheraton Framingham Hotel and Conference Center

The day features Jim McCabe as keynote speaker talking about the importance of supply chain engagement, sessions on metal finishing solutions, and resource conservation case studies from the Kentucky Pollution Prevention Center.

Building a More Sustainable Supply Chain
Tuesday, October 4, 2016
Devens, MA

This breakfast meeting in Devens is part of the Massachusetts Manufacturing Month and is being co-hosted by TURI, MassMEP and MassDevelopment.

TURI Open House
Wednesday, October 5, 2016
3:00 to 5:00 PM

MA Manufacturing Month with Mark Richey
Thursday, October 27
Newburyport, MA

Other Events of Interest

Zero Waste Training
October 19, 2016
US EPA Region 1 Headquarters
Post Office Square
Boston, MA

2016 N.E. Surface Finishing Regional Conference
November 4, 2016
Hyannis, MA
For more information contact

safety test results, will be communicated to fire chiefs and gyms across the Commonwealth.

nesurfinregional@aol.com

Safer cleaning and disinfection

A number of the projects focus on safer cleaning methods - ranging from household cleaning to dry cleaning and institutional cleaning and disinfection.

- UMass Lowell faculty researchers are partnering with MD Stetson of Randolph to test the effectiveness of cleaners to also disinfect without added disinfectant chemicals in selected areas of schools, hospitals and other public spaces.
- Belmont Hill Cleaners will replace its dry cleaning machine that uses percholorethylene, a probable human carcinogen, with professional wet cleaning. The small business will also collect cost and performance data and conduct a demonstration for other dry cleaners in Massachusetts.
- Merrimack Ales, a microbrewery in Lowell, is testing the performance of technologies that use safer chemicals to clean and sanitize brewery tanks.
- Groundwork Lawrence is conducting workshops about toxics found in common household cleaners and how to make safer cleaning products. Working with bodegas in the community, Groundwork Lawrence will share home recipes for safer cleaning products made with common household ingredients.

Reducing Solvent Use

- UMass Amherst faculty researchers will partner with Camco Manufacturing of Leominster to develop and test safer formulations for windshield washer products that contain methanol, a volatile organic chemical linked with reproductive toxicity.
- Minuteman Press of Foxboro will replace a lithographic off-set press that uses solvent cleaners with a digital envelope press.

Green Building

The Hitchcock Center for the Environment in Amherst, which opened a new 9,000 square foot environmental education center designed in accordance with The Living Building Challenge, will present a series of programs on safer products used in construction.

Reducing BPA

Press Pass TV in Haydenville will create an educational video on how to reduce exposure to bisphenol-A (BPA), a substance that is used to coat thermal paper store receipts and can interfere with natural hormones. Press Pass TV, which uses media arts to provide meaningful employment and education for youth living in low-income neighborhoods, will distribute the video via social media.

Reducing Pesticides

Boy Scout Thomas Lebel of Topsfield will build and install bat houses on the Topsfield section of the Rail Trail. By attracting and providing habitat for mosquito-eating bats, the bat houses have the potential to decrease the use of pesticides.

TURI Lab Students Win NPPR MVP2 Award

Abigail Giarrosso

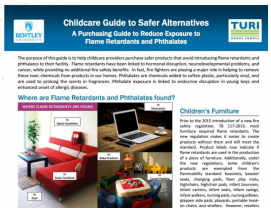
Alicia McCarthy

UMass Lowell students Alicia McCarthy and Abigail Giarrosso have been selected to receive a National Pollution Prevention Roundtable (NPPR) Most Valuable Pollution Prevention (MVP2) Student of the Year award.

Among their many accomplishments, Abby has been instrumental in assisting with the testing and evaluation of alternatives to methylene chloride used in paint strippers and Alicia led the performance testing team that evaluated safer solvents to TCE and PCE.

Alicia is earning her Master's Degree in Occupational Health and Abby is earning her Bachelor's in Chemistry.

Childcare Guide to Safer Alternatives



Childcare Guide to Safer Alternatives

Download this guide developed by a TURI grantee, Ryan Bouldin, Assistant Professor of Sustainable Chemistry at Bentley University. The purpose of this guide is to help childcare providers purchase safer products that avoid introducing flame retardants and phthalates to their facility.

SAB Call for Information

Long and short chain perfluoroalkyl substances (PFASs) including PFOA and PFOS

The TURA Science Advisory Board (SAB) will be reviewing hazard information on long and short chain perfluoroalkyl substances, including perfluorooctane sulfonic acid (PFOS) and perfluorooctanoic acid (PFOA). If you have information that you think would be useful, please contact Heather Tenney at TURI.

Amendments to TURA Regulations 301 CMR 40.00 and 301 CMR 41.00

New Higher Hazard Substances for 2017: Toluene Diisocyanates

Please note that effective January 1, 2017, 2,4-TDI (CAS 584-84-9); 2,6-TDI (CAS 91-08-7); and TDI Mixed Isomers (CAS 26471-62-5) are designated as Higher Hazard Substances (HHS) under TURA, with a reporting threshold of 1,000 lbs. For more information on the recently promulgated regulations and the previous public comment process, click this link and scroll to *Amendments to TURA Regulations 301 CMR 40.00 and 301 CMR 41.00.*

TURI offers services & programs to reduce the use of toxic chemicals, energy and water while enhancing the competitiveness of Massachusetts businesses.

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