Massachusetts
Toxics Use Reduction

TURA Program Update

Nov 13, 2019

Norwood, MA

TURI
TOXICS USE REDUCTION INSTITUTE
UMASS LOWELL

MassDEP

OTA
OFFICE OF TECHNICAL
ASSISTANCE & TECHNOLOGY

TURA Chemical List

- **C1-C4 Halogenated Hydrocarbons/ Halocarbons Not Otherwise Listed**
  - State only chemical
  - First reports due July 1, 2020 (for RY2019)

https://www.turi.org/Our_Work/Training/Continuing_Education/Recent_Training_Presentations/Continuing_Education_Conference_Spring_2019/C1-C4_Halogenated_Hydrocarbon_Halocarbons_Not_Otherwise_Listed_NOL_Category/(is_direct_download)/1

- **Nonylphenol ethoxylates (NPEs) TRI/EPCRA category**
  - Category of 13 specific NPEs
  - TRI/Federal: First reports due July 1, 2020 (for RY2019)
  - TURA/State: First reports due July 1, 2021 (for RY 2020)
  - https://www.epa.gov/toxics-release-inventory-tri-program/addition-npes-category-tri-list-final-rule
  - https://www.mass.gov/files/documents/2019/04/04/turachanges.pdf

TUR Planning

- 2020 is a TUR planning year!
  - TUR Plan summaries due July 1, 2020
- Compliance: MassDEP has issued selected Requests for Information (RFIs) to submit plans for inspection
- Revised guidance available

Resource Conservation Planning

- Certified RC Planner training - required once to become RC certified
  - Jan 23, 2020, Lowell, MA – full day
  - Only an option if you have not yet been certified in RC planning

- RC Planning Conference
  - Feb 7, 2020, Devens, MA
  - Open to everyone, for RC Certification, full day = 6 RC credits
  - Priority registration given to new RC planners

Resource Conservation Planning

Note: Non-reportable/Exempt Toxics alternative under TURA RC planning provisions

RC Plans that must be signed by RC Certified Planner

1. **Energy**
2. **Water**
3. **Materials That Contribute to Solid Waste**

Only needs to be signed by certified TUR Planner

4. Toxic Substances Used Below Threshold; Chemical Substances Exempt from TURA Reporting

Planning for Non-reportable and Exempt Chemicals

- Toxics below threshold
- Emerging, unlisted hazards
- Toxics in laboratories
- Toxics in pilot plant production
- Toxics in janitorial uses
- Toxics in products sold
- Toxics in articles used in facility
- R&D, DfE

PFAS and Science Advisory Board

- Update: Science Advisory Board Work on Per- and Polyfluoroalkyl Substances (PFAS)
  - Reviewed scientific literature and voted to recommend listing:
    - PFBA, PFBS (C4)
    - PFHxA, PFHxS (C6)
    - PFHpA (C7)
    - PFOA, PFOS (C8)
    - PFNA (C9)
    - PFECA: GenX/HFPO-DA (C3 ether)
  - Upcoming meeting - Nov 14, 2019
    - MassDEP, Boston 12:30pm
    - PFPA, PFPiA (phosphonic and phosphinic acids)
    - Precursors and degradation/transformation pathways

TURA Administrative Council

- Upcoming Meeting:

November 18, 2019

10:00 A.M. to 12:00 noon

Saltonstall Building

100 Cambridge Street, Suite 900, OTA Conference Rm.

Agenda

- NPE category regulations
- SAB work on PFAS chemicals
- Draft PFAS policy analysis
- Ad Hoc committee on TURA Improvement

TURA Staff Changes

- Andrea Lynch – TURI Learning Support Specialist

- Hayley Byra – TURI Science/EHS Support Specialist

TURI Co-Directors

- Prof. Emeritus Mike Ellenbecker
  - Industrial hygienist, expertise in aerosol science, nanomaterials, ventilation and occupational health and safety

- Prof. Joel Tickner, Public Health
  - Expertise in environmental and chemicals policy, alternatives assessment and green chemistry (GC3)

- Assoc. Prof. Chris Hansen, Mechanical Engineering
  - Expertise in development of safer materials, additive manufacturing, and composites

TURA Staff Changes

- MassDEP TURA/Toxics team
  - Richard Blanchet – Deputy Director Hazardous Materials Management, Bureau of Air and Waste
  - Veronica O'Donnell – Branch Chief Compliance and Enforcement and TURA/Toxics Programs
  - Lynn Heisey Cain – Environmental Analyst TURA
  - Hardiesse Dicka-Bessonneau – Environmental Analyst TURA/Toxics Programs

- OTA Team https://www.mass.gov/service-details/otas-team
  - Jim Cain – Sr. Engineer/Technical Assistance Team Lead
  - Tiffany Skogstrom – Outreach and Policy Analyst

TURA Program Resources

TURI Grant Projects – FY 2020
Small Business

- The Gym Club Gymnastics Center - Gardner
  - Replacing flame retardant foam pit cubes with non-flame retardant cubes
- Outstanding Bath Refinishers - Mendon
  - Evaluating safer, non-methylene chloride paint removers
- Workshop Auto - Lowell
  - Safer engine and parts washer

TURI Grant Projects – FY 2020
Industry

- Bird Precision – Waltham
  - Eliminating TCE in precision parts cleaning
- CD Aero – New Bedford
  - Eliminating nPB in capacitor manufacturing
- MSI Transducers Corp. – Littleton
  - Redesigning acoustic transducer tools to reduce use of lead

TURI Grant Projects – FY 2020
Industry

- Plenus Group Inc. – Lowell
  - Evaluating safer CIP cleaners for food processing
- River Street Metal Finishing – Braintree
  - Using filtration to extend bath life of sulfuric acid anodizing tank
- Riverdale Mills – Northbridge
  - Reducing HCl drag-out from pickling tank and NH_4OH for pH adjustment

TURI Grant Projects – FY 2020
Academic Research

Project	Faculty Researcher	Industry Partner
Researching safer alternative to methylene chloride for difficult to remove CARC coatings	Asst Prof Wan-Ting (Grace) Chen, Plastics Engineering	Raytheon Company
Safer solvent blends to replace DMF in textile coatings	Prof Ramaswamy Nagarajan, Plastics Engineering	Bradford Industries, Lowell
Safer solvents to replace acetonitrile in liquid chromatography	Asst Prof His-Wu Wong, Chemical Engineering	Waters Corp, Milford