

Greenlist Bulletin

From the Toxics Use Reduction Institute
at the University of Massachusetts Lowell

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This is the weekly bulletin of the TURI Library at the University of Massachusetts Lowell. Greenlist Bulletin provides previews of recent publications and websites relevant to reducing the use of toxic chemicals by industries, businesses, communities, individuals and government. You are welcome to send a message to mary@turi.org if you would like more information on any of the articles listed here, or if this email is not displaying properly.



Chemical Alternatives Assessments

[Source: Royal Society of Chemistry, 2013](#)

Editor(s): R. M. Harrison and R. E. Hester

Chemicals are an essential part of everyday life and all too-often taken for granted, yet often portrayed negatively in the media. Concern over the deleterious effects of chemicals to the environment and human health have prompted governments in the developed world to establish screening programs such as REACH and HPV Challenge to identify chemicals presenting the greatest degree of risk to health and the environment.

While such programs identify chemicals with the greatest risk, there is no ranking system for alternative chemicals, which while being potentially less harmful, still carry a degree of risk. This volume of the *Issues in Environmental Science and Technology* series investigates how the alternatives can be assessed and their risk determined.

With contributions from experts across the globe, this volume addresses some of the key concepts behind risk assessment of alternative chemicals. Some of the current protocols adopted are discussed, and several chapters explore the topic in the context of industry, making this book essential reading for industrialists as well as academics, postgraduate students and policy makers.

TURI's Note: Greg Morose, a Research Manager at TURI, co-authored the chapter titled "A Collaborative Industry and University Alternative Assessment of Plasticizers for Wire and Cable."

From Cradle-to-Grave at the Nanoscale: Gaps in U.S. Regulatory Oversight along the Nanomaterial Life Cycle

[Source: Environmental Science and Technology, May 13, 2013](#)

Authors: Christian E. H. Beaudrie, Milind Kandlikar, and Terre Satterfield

Engineered nanomaterials (ENMs) promise great benefits for society, yet our knowledge of potential risks and best practices for regulation are still in their infancy. Toward the end of better practices,

this paper analyzes U.S. federal environmental, health, and safety (EHS) regulations using a life cycle framework. It evaluates their adequacy as applied to ENMs to identify gaps through which emerging nanomaterials may escape regulation from initial production to end-of-life. High scientific uncertainty, a lack of EHS and product data, inappropriately designed exemptions and thresholds, and limited agency resources are a challenge to both the applicability and adequacy of current regulations. The result is that some forms of engineered nanomaterials may escape federal oversight and rigorous risk review at one or more stages along their life cycle, with the largest gaps occurring at the postmarket stages, and at points of ENM release to the environment. Oversight can be improved through pending regulatory reforms, increased research and development for the monitoring, control, and analysis of environmental and end-of-life releases, introduction of periodic re-evaluation of ENM risks, and fostering a "bottom-up" stewardship approach to the responsible management of risks from engineered nanomaterials.

[Read more...](#)

Chemical Troubles in Toms River

[Source: *Chemical & Engineering News*, May 6, 2013](#)

Author: Rudy M. Baum

It's no secret that until fairly recently the chemical industry's waste-handling practices left a lot to be desired. The chemical industry wasn't alone, of course. Since the dawn of civilization, humans have dealt with waste primarily by digging a hole and burying it or pouring it into the nearest body of flowing water. In far too many places in the world, they still do.

The chemical industry is unique, however, because it exists to create new, useful, and profitable molecules. Many of those molecules – pharmaceuticals, pesticides, dyes, polymers, a variety of specialty chemicals – are organic chemicals derived from hydrocarbon feedstocks. Their production has historically involved a lot of organic solvents and resulted in waste streams made up of spent solvent and a witches' brew of often uncharacterized organic by-products. Many of the solvents and compounds in those waste streams were toxic, mutagenic, teratogenic, and/or carcinogenic.

[Read more...](#)

TURI's Note: The TURI Library owns a copy of the book on which this article focuses, Dan Fagin's *Toms River: A Story of Science and Salvation*.

Mercury Thermostats

[Source: *Environmental News Network*, May 23, 2013](#)

Author: Andy Soos

Most home thermostats contain a few grams of mercury. Although they only contain small quantities of mercury and do not by themselves exceed any regulatory threshold, they contain enough mercury to potentially cause a significant health risk. The state of California has issued new rules that will greatly reduce the amount of dangerous mercury sent to landfills and incinerators each year due to the improper disposal of old mercury-laden thermostats. The new rules will require thermostat manufacturers to collect and recycle the vast majority of discarded mercury thermostats in California. Over the next five years, this will keep nearly 2 tons of the toxin out of garbage trucks, landfills and incinerators where the mercury can be released from crushing or burning, according to the Natural Resources Defense Council, the California Product Stewardship Council, and the California Sierra Club.

[Read more...](#)

Current National Priorities List (NPL) Updates: New Proposed and New Final NPL Sites

[Source: U.S. Environmental Protection Agency, May 22, 2013](#)

The National Priorities List is updated periodically, as mandated by CERCLA (CERCLA Overview). The EPA publishes the list of NPL sites in the Federal Register. The EPA will publish a rule in the Federal Register on May 24, 2013, proposing to add nine sites and adding nine sites to the NPL.

[Read more...](#)

[The National Priorities List (NPL) is the list of national priorities among the known releases or

threatened releases of hazardous substances, pollutants, or contaminants throughout the United States and its territories. The NPL is intended primarily to guide the EPA in determining which sites warrant further investigation.]



Access Final NPL sites [here](#). Access Proposed NPL sites [here](#).

TURI's Note: Two Massachusetts facilities, in Danvers and Attleboro, have been added to the Final NPL list.

Please send a message to mary@turi.org if you would like more information on any of these resources. Also, please tell us what topics you are particularly interested in monitoring, and who else should see Greenlist. An online search of the TURI Library catalog can be done at <http://library.turi.org> for greater topic coverage.

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