

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.



No more just California Dreamin': First three priority products proposed

[Source: Environmental Defense Fund, March 13, 2014](#)

Author: Jennifer McPartland

Today the California Department of Toxic Substances Control (DTSC) announced its first three draft priority products -- the next major milestone in the implementation of its Safer Consumer Product (SCP) regulations to address chemicals of concern in the marketplace. While we're still at the start of a long process, today's announcement is the clearest indicator to date of the impact these regulations may have on consumer products.

The release of the draft priority products follows DTSC's release last September of its candidate chemicals list and from within this list, the subset initial candidate chemicals list. Together with the initial candidate chemical list, the identification of the draft priority products now defines the possible set of chemical-product combinations that may head toward alternatives assessment. Read on for a description of the chemicals and products and of the next phase of regulatory actions.

[Read more...](#)

Access California Department of Toxic Substances Control [Fact Sheet on 'The Draft Initial Priority Products List'](#).

TURI's Note: See the [Policy Analysis](#) on methylene chloride and the [press release](#) regarding its designation as a higher hazard substance. Access our methylene chloride 1-page fact sheet [here](#).

Hexavalent Chromium Fact Sheet

[Source: Toxics Use Reduction Institute, March 2014](#)

This fact sheet is part of a series of chemical fact sheets developed by TURI to help Massachusetts companies, community organizations and residents understand the chemical's use and health and environmental effects, as well as the availability of safer alternatives.

Hexavalent chromium compounds are a toxic form of chromium and are used in a variety of industrial processes and products.

Hexavalent chromium compounds are human carcinogens, mutagens and developmental toxicants and are acutely toxic. Non-hexavalent chromium compounds do not pose the same level of concern with regard to either chronic or acute toxicity.

Access fact sheet [here](#).

What's Next for the Aerospace NESHAP?

[Source: Products Finishing, March 1, 2014](#)

Authors: Jerry Bauer and Sam Sutton

Since 1998, many aerospace manufacturing and rework facilities have been operating and maintaining records in accordance with 40 CFR Part 63 Subpart GG, commonly referred to as the Aerospace National Emission Standard for Hazardous Air Pollutants, or NESHAP.

Under the Clean Air Act (CAA), the U.S. EPA is required to continually revise the longstanding regulation. The industry is still at least a few months away from getting a glimpse at the next proposed revision -- and at least three years away from having to actually implement the requirements in the forthcoming regulation. However, some reasonable projections of what the revised aerospace NESHAP rule will look like can be made based on the CAA, recent NESHAPs issued by EPA for other similar industries/source categories, information posted on the EPA website and discussions with aerospace industry trade groups and individual aerospace companies.

[Read more...](#)

Also read from *Products Finishing*, "[California Raises Hex Chromium Standard 500%](#)".

Haz-Map Updated with 481 Agents

[Source: U.S. National Library of Medicine Technical Bulletin, February 14, 2014](#)

The National Library of Medicine has updated Haz-Map with 481 new agents, including 23 agents causing occupational asthma. Fifteen new hazardous job tasks linked to jobs and industries were also added in this update.

Haz-Map now covers over 9,170 chemical and biological agents and 241 occupational diseases.

[Read more...](#)

TURI's Note: See our [fact sheet on asthma-related chemicals](#).

Current Landscape of Alternatives Assessment Practice: A Meta-Review

[Source: Organization for Economic Co-operation and Development, November 28, 2013](#)

As interest in the substitution of harmful chemicals continues to grow in industry, NGOs and the public sector, organizations are seeking guidance on the selection of appropriate methods and tools. OECD is responding to this need. The OECD's 49th Joint Meeting of the Chemicals Committee and the Working Party on Chemicals, Pesticides, and Biotechnology established an Ad Hoc Group on Substitution of Harmful Chemicals with the goal of furthering tools and approaches to support decision making for the substitution of chemicals of concern. As part of its work, the Joint Meeting requested that the Ad Hoc Group build on existing work to develop a toolbox to support the evaluation of alternatives when safer substitutes to chemicals of concern are sought.

This report is the first output from this work stream. It summarizes the literature on substitution of chemicals of concern (or alternatives assessment, which is the term in use in Northern America), with a focus on the current landscape of substitution practice in OECD member countries. It discusses definitions, principles, frameworks and tools for alternatives assessments, as well as the key drivers and audiences, and it identifies the contribution that OECD can make in this space.

Access report [here](#).

TURI's Note: Click [here to join the Safer Alternatives Assessment Practitioners group](#) on LinkedIn.

Lignin in the Laboratory

[Source: Adhesives and Sealants Industry, March 1, 2014](#)

Author: Dale Mitchell

A new source of lignin has been developed that produces a consistent quality for commercial quantities. It's helping spur a push to reexamine the chemical process used to make adhesives and sealants, and the result could be a greener, more cost-effective alternative to synthetic elastomers and petrochemicals.

The use of lignin gained momentum last year, when a state-of-the-art, commercial-scale lignin separation plant was successfully installed in Plymouth, N.C. -- the first U.S. facility of its type in more than 25 years. The project has so much potential that the Biomass Research and Development Initiative awarded a federal grant to the facility.

[Read more...](#)

Bioaccessibility of As, Cd, Cu, Ni, Pb, and Sb in Toys and Low-Cost Jewelry

[Source: Environmental, Science and Technology, December 17, 2013](#)

Authors: Mert Guney and Gerald J. Zagury

Children can be exposed to toxic elements in toys and jewelry following ingestion. As, Cd, Cu, Ni, Pb, and Sb bioavailability was assessed ($n = 24$) via the in vitro gastrointestinal protocol (IVG), the physiologically based extraction test (PBET), and the European Toy Safety Standard protocol (EN 71-3), and health risks were characterized. Cd, Cu, Ni, and Pb were mobilized from 19 metallic toys and jewelry (MJ) and one crayon set. Bioaccessible Cd, Ni, or Pb exceeded EU migratable concentration limits in four to six MJ, depending on the protocol. Using two-phase (gastric + intestinal) IVG or PBET might be preferable over EN 71-3 since they better represent gastrointestinal physiology. Bioaccessible and total metal concentrations were different and not always correlated, indicating that bioaccessibility measurement may provide more accurate risk characterization. More information on impacts of multiple factors affecting metals mobilization from toys and jewelry is needed before recommending specific tests. Hazard index (HI) for Cd, Ni, or Pb were >1 for all six MJ exceeding the EU limits. For infants (6-12 mo old), 10 MJ had HI > 1 for Cd, Cu, Ni, or Pb (up to 75 for Cd and 43 for Pb). Research on prolonged exposure to MJ and comprehensive risk characterization for toys and jewelry exposure is recommended.

[Read more...](#)

Green cleaning: The journey from niche to mainstream

[Source: GreenBiz.com, March 7, 2014](#)

Author: Stephen Ashkin

In 1962, Rachel Carson's groundbreaking book "Silent Spring" was published. It forced the general public and members of the U.S. government to take a serious look at society's use of chemicals and pesticides.

By the end of the decade, young people around the world took up the cause for "ecology," as it was then called. This led to the first Earth Day in 1970, an event reflecting the much greater environmental consciousness that was spreading throughout the world.

Not long afterward, the first green cleaning products made their way onto the shelves of health food stores as the green cleaning movement began. Today, green cleaning is no longer niche, with an increasing number of certifications and other tools that have pushed it into the mainstream.

[Read more...](#)

TURI's Note: Access our [Cleaner Solutions database](#), which links performance evaluations of cleaning products with specific testing parameters, matching performance with contaminant, substrate, equipment, etc..., based on testing performed at the TURI lab.

Groups protest chemicals used in Apple's iPhone

[Source: The Washington Post, March 12, 2014](#)

SAN FRANCISCO -- Apple's labor practices are under attack by two activist groups who contend the company makes its iPhones with a hazardous mix of chemicals that threaten the health of factory workers assembling the devices in China.

The campaign began Wednesday with an online petition put together by China Labor Watch, a longtime Apple critic, and Green America, an environmental protection group.

If enough consumers sign the "Bad Apple" petition, the two groups hope to pressure the company into abandoning the use of two chemicals, benzene and n-hexane, in the production of the iPhone, Apple's top-selling product.

[Read more...](#)



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