Greenlist BULLETIN

TURI
TOXICS USE REDUCTION INSTITUTE
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This is the bi-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.

US EPA issues final TSCA framework rules

Source: *Chemical Watch*, June 22, 2017
Author: Kelly Franklin

Three final framework rules under the new TSCA, as well as scoping documents for the first ten substances subject to risk evaluation, were due to be issued by the US EPA within a matter of hours as *Chemical Watch* went to press today.
The release of the documents comes on the one-year anniversary of passage of the Frank R. Lautenberg Chemical Safety for the 21st Century Act -- and on its statutory deadline for actions that must be completed within a year of the law's passage.

The rules are:

- **the prioritisation rule**, which outlines the process by which the EPA will prioritise existing chemicals for evaluating their risks, including the criteria for designating chemical substances as high-priority or low-priority substances for risk evaluation;
- **the risk evaluation rule**, describing how the agency will evaluate the risk posed by existing substances to determine whether they present an unreasonable risk to human health or the environment; and
- **the 'inventory reset' rule**, which lays out how the agency will designate substances on the TSCA inventory as 'active' and 'inactive'.

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See from the U.S. EPA, "EPA Marks Chemical Safety Milestone on 1st Anniversary of Lautenberg Chemical Safety Act".

See from Environmental Defense Fund, "Final TSCA framework rules retreat from best available science". See from Natural Resources Defense Council, "Trump EPA Weakens TSCA Rules to Favor Chemical Industry".

TURI's Note: See our updated Toxic Substances Control Act (TSCA) page for additional information about these changes.

Attempts to limit the use of hazardous substances in Europe are being hindered by poor implementation of Europe's chemical laws

Source: European Environmental Bureau, July 3, 2017
Author: Ian Carey

Governments who want to limit the use of toxic chemicals are being set a high burden of proof while industry concerns are being accepted with little evidence by the European Chemicals Agency (ECHA), analysis by the European Environmental Bureau (EEB) has found.

This finding comes from a report by the EEB into the restriction of hazardous chemicals under the EU's REACH chemical regulations.

The EEB is Europe's largest network of environmental organizations with 141 members in over 30 countries.

Key findings of the report include:

- Member states have a high burden of proof put on them if they propose restricting a hazardous chemical to protect human health and the environment.
- ECHA committees arbitrarily modify proposals to restrict chemicals usually weakening and undermining them with little transparency.
- Decisions by ECHA committees have underestimated the benefits of restricting hazardous chemicals because of an over-reliance on quantitative evidence.

In the report, entitled '*Restricted Success: EEB's appraisal of restriction under REACH*', the EEB describes how the implementation of the restriction process by ECHA Committees and the Commission is reducing the capacity of REACH to protect people and the environment.

Read more...

National COSH on Proposed Rollback of Beryllium Rules: Workers Deserve Protection in All Workplaces

Source: National Council for Occupational Safety and Health, June 23, 2017
Author: Jessica Martinez

"No matter where they work, U.S. workers deserve protection from exposure to hazardous -- and potentially lethal -- toxic materials".

"The proposal announced today by the U.S. Department of Labor to weaken standards

that limit exposure to beryllium for shipyard and construction workers is a step backwards. Beryllium can cause debilitating lung disease as well as lung cancer".

"The U.S. Occupational Safety and Health Administration spent more than a decade on the rulemaking process for the standard that would be severely weakened by the proposal announced today. It is well documented that shipyard and construction workers can be exposed to beryllium. They need the same protections as other workers -- including monitoring and assessing exposure to potential harm and taking steps to eliminate hazards which can lead to life-threatening diseases."

Read more...

See from *PaintSquare*, "OSHA Proposes Beryllium Rule Changes".

See also from the National Employment Law Project, "Trump DOL Proposes Rollback of Beryllium Protections".

Safer Alternatives for the Automotive Industry

Source: Pacific Northwest Pollution Prevention Resource Center, 2017

Commonly-used cleaners in an automotive shop can be dangerous to your health and to the environment. In addition, many operations within an automotive shop (floor cleanup, antifreeze replacement, etc.) can lead to the mismanagement and misapplication of products and, therefore, may cause serious compliance issues for your business. It is important for owners and technicians in an automotive repair shop to be informed of the chemicals contained in the products they use as well as having good working habits to reduce liability and to improve the business's bottom line.

PPRC developed resources to help automotive owners and technicians get informed about common chemicals found in a repair shop. In addition, the resources developed were designed to help the Do-It-Yourselfers (DIYers) as well as the professionals involved in the industry.

Read more...

See the PPRC fact sheet, "Safer Alternatives for Auto Repair Shops: Aerosol Brake Cleaners, Engine Degreasers & Fuel Injectors".

TURI's Note: See our Auto Repair and Body Shops page for additional resources on alternatives.

MSC unanimously agrees that Bisphenol A is an endocrine disruptor

Source: European Chemicals Agency, June 16, 2017

Helsinki, 16 June 2017 -- The Member State Committee unanimously agreed on the identification as substances of very high concern (SVHCs) of:

- 4,4'-isopropylidenediphenol (bisphenol A, BPA) (EC 201-245-8, CAS 80-05-7), proposed by France, due to its endocrine disrupting properties for human health;
- Perfluorohexane-1-sulphonic acid and its salts (PFHxS), proposed by Sweden, due to their very persistent and very bioaccumulative (vPvB) properties.

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Hundreds of scientists call for caution on anti-microbial chemical use

Source: *Environmental Health News*, June 20, 2017
Author: Brian Bienkowski

Two ingredients used in thousands of products to kill bacteria, fungi and viruses linger in the environment and pose a risk to human health, according to a statement released today by more than 200 scientists and health professionals.

The scientists say the possible benefits in most uses of triclosan and triclocarban -- used in some soaps, toothpastes, detergents, paints, carpets -- are not worth the risk. The statement, published today in the *Environmental Health Perspectives* journal, urges "the international community to limit the production and use of triclosan and triclocarban and to question the use of other antimicrobials."

They also call for warning labels on any product containing triclosan and triclocarban and for bolstered research of the chemicals' environmental toll.

The statement says evidence that the compounds are accumulating in water, land, wildlife and humans is sufficient to merit action.

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Also see from *Environmental Health News*, "Hygiene leaves kids with loads of triclosan".

See from *Environmental Health Perspectives*, "The Florence Statement on Triclosan and Triclocarban".

Healthy Building Network and Perkins+Will Conclude Antimicrobial Building Products Are Best Avoided

Source: Healthy Building Network, March 1, 2017
Authors: Melissa Coffin and Gina Ciganik

Washington, DC: In the second paper published from their collaboration, Healthy Building Network and global architecture firm Perkins+Will released an analysis today that recommends avoiding the use of building products treated with antimicrobial additives. Since no evidence exists that the ability of an antimicrobial agent to kill pathogens translates to fewer infections in practice, and many manufacturers are simply marketing products containing preservatives, avoiding antimicrobial products categorically saves material specifiers time and bypasses confusing marketing practices. ...

Healthy Environments: Understanding Antimicrobial Ingredients in Building Materials reviews manufacturer claims about their products, the state of the science on antimicrobial additives, and offers analysis of complex federal regulation that allows for confusing and potentially misleading marketing claims about the benefits of antimicrobials. The report notes that despite some product claims that they kill infectious bacteria in living spaces, longstanding guidance from the US Centers for Disease Control and Prevention and a recent ban by the US Food and Drug Administration both cite a lack of any evidence that antimicrobial products have any benefit to human health. Many antimicrobial additives in building products are added to preserve the product itself, not to kill infectious bacteria in living spaces, but due to a regulatory loophole and aggressive marketing by manufacturers, consumers may be easily misled into thinking that these products have health benefits.

The report points to growing evidence that widespread use of antimicrobial additives has consequences for public health, and the health of the environment at large. After exposure to common antimicrobial additives, researchers have found that microbes can become resistant both to the additive and to therapeutic antibiotics used in healthcare to

prevent illness. Antimicrobial additives can also leach out of their host products over time and make their way into ecosystems. Some antimicrobials are based on nanoparticles, a field of engineering with environmental and human health understanding that is still in its infancy.

Read more...

See from *Healthy Building News*, "Perkins + Will Adds Antimicrobial Products to Precautionary List". Also, see Perkins + Will March 2017 white paper, "Healthy Environments: Understanding Antimicrobial Ingredients in Building Materials".

WHO Seeks Comment on Draft Document Concerning Assessing the Risk of Immunotoxicity Associated with Exposure to Nanomaterials

Source: Bergeson & Campbell PC, June 20, 2017
Authors: Lynn Bergeson and Carla Hutton

The World Health Organization's (WHO) International Program on Chemical Safety (IPCS) published a draft Environmental Health Criteria (EHC) Document, Principles and Methods to Assess the Risk of Immunotoxicity Associated with Exposure to Nanomaterials. According to IPCS, the target audience is risk assessors in a regulatory setting, researchers, and industry that needs to provide the data for assessment. The draft EHC Document states that recent reports have identified engineered nanomaterials as potential stimulants of immune response that may culminate in eventual immunotoxicity. The draft EHC Document acknowledges that there are no validated methodology available to assess the immunotoxicity of nanomaterials, and outlines several assays that are conventionally used to assess chemical-induced immunotoxicity that may be compliant with nanomaterial testing. In general terms, according to the draft EHC Document, risk assessment of nanomaterials should follow the risk assessment paradigm for chemicals -- hazard identification, hazard characterization, exposure assessment, and risk characterization. The draft EHC Document states that the design to perform risk analysis should be done on a case-by-case basis, flexibly including the components most appropriate for the material and its proposed use. The draft EHC Document includes case studies for carbon nanotubes and silver nanoparticles. Comments are due July 21, 2017.

See the WHO draft Environmental Health Criteria document, "Principles and Methods to Assess the Risk of Immunotoxicity Associated with Exposure to Nanomaterials".

Also see from *SafeNano*, "Nanoparticles as food additives: improving risk assessment".

Why chemical engineers -- not just economists -- are key to a circular future

Source: GreenBiz.com, June 23, 2017
Author: Roland Clift

Today's professional chemical engineers accept responsibility for avoiding or abating pollution of the environment by the process industries.

But the profession, of which I am proud to be a part, should play a more fundamental role in sustainability. We need a complete rethink of the way we manage and use resources, including energy and land, as well as materials. ...

Chemical engineering is concerned with managing flows and transformations of materials and energy in industrial plants. It has become the engineering discipline of the process industries, which include chemicals, petrochemicals, plastics, water, energy,

pharmaceuticals and food. Simply put, chemical engineers turn raw materials into products, whereas mechanical engineers turn products into devices and machines. ...

Chemical engineering is a key discipline contributing to industrial ecology. Industrial ecology is "the study of the flows of materials and energy in industrial and consumer activities, of the effects of these flows on the environment, and of the influences of economic, political, regulatory and social factors on the flow, use and transformation of resources." Even the basic tools used in industrial ecology, including life cycle assessment and material flow accounting, are a combination of chemical engineering fundamentals.

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Dell Says 'Ocean Plastic' Packaging Is Cost-Effective, Scalable

Source: *Environmental Leader,* June 19, 2017
Author: Jennifer Hermes

Dell has begun shipping its XPS 13 in materials made in part from plastic pollution from the ocean. The company spent about 18 months doing a detailed assessment and validation, followed by a pilot, based on using ocean plastic in a way that is cost-effective and commercially scalable.

The notebook is nestled inside a gift box, resting upon a tray made from high-density polyethylene, which in turn is made up of 75% post-consumer recycled HDPE and 25% "ocean plastic" that was intercepted from streets, canals and rivers before it reaches the ocean, says Oliver Campbell, Dell's director of procurement and packaging innovation (via Packaging World).

While companies often hesitate to discuss the cost -- or cost savings -- of their environmental programs, the truth is that the business-case for sustainability must make sense in order for sustainability to remain viable. Campbell, on the other hand, is happy to talk about the business case for sustainable packaging. When it comes to innovative packaging materials compared to traditional materials, for example, "they had to be at cost parity or better," he says. Sustainability must lead the way to the future not only by "being greener," but through cost savings, he said.

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