

Greenlist Bulletin

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

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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.



The Business Case for Knowing Chemicals in Products and Supply Chains

[Source: Clean Production Action, December 15, 2014](#)

Author: Mark Rossi

Geneva, 15 December 2014 -- Chemicals are all around us, present in the products we use every day. The demand for increased transparency on chemicals up and down the supply chain is growing -- we need to understand how and with what chemicals we are interacting.

Consumers, retailers and brands all want to know more, driving companies to disclose information about the hazardous chemicals in their products and to make safer choices.

Now a new report, The Business Case for Knowing Chemicals in Products and Supply Chains, highlights the benefits to companies when they invest in an "Active Strategy" for chemicals management, one in which they proactively manage the chemicals in their products and supply chains to stay ahead of regulatory and market demands.

[Read more...](#)

Download full report [here](#).

Learn more about this report by joining Clean Production Action's [webinar](#) on the report, Tuesday, February 10, 2015, 11:00 AM - 12:00 PM EST.

OECD Substitution and Alternatives Assessment Toolbox

[Source: Organization for Economic Cooperation and Development, January 2015](#)

Welcome to the OECD Substitution and Alternatives Assessment Toolbox (SAAT) -- a compilation of resources relevant to chemical substitution and alternatives assessments. Visit the four resource areas below to learn more about chemical substitution and alternatives assessments and get practical guidance on conducting them.

[Read more...](#)

TURI's Note: Our [Pollution Prevention Options Analysis System \(P2OASys\)](#) is one of the tools available [in the toolbox](#).

Common Pesticide May Increase Risk of ADHD

[Source: Rutgers University, January 29, 2015](#)

Author: Robin Lally

A commonly used pesticide may alter the development of the brain's dopamine system -- responsible for emotional expression and cognitive function -- and increase the risk of attention deficit hyperactivity disorder in children, according to a new Rutgers study.

The research published Wednesday in the *Journal of the Federation of American Societies for Experimental Biology (FASEB)*, by Rutgers scientists and colleagues from Emory University, the University of Rochester Medical Center, and Wake Forest University discovered that mice exposed to the pyrethroid pesticide deltamethrin in utero and through lactation exhibited several features of ADHD, including dysfunctional dopamine signaling in the brain, hyperactivity, working memory, attention deficits and impulsive-like behavior.

[Read more...](#)

See original study in the *Journal of the Federation of American Societies for Experimental Biology (FASEB)*, "[Developmental pesticide exposure reproduces features of attention deficit hyperactivity disorder](#)".

GEMI Launches Supply Chain Sustainability Tool

[Source: Environmental Leader, January 23, 2015](#)

The Global Environmental Management Initiative has launched a Supply Chain Sustainability (SCS) Tool, which aims to help procurement professionals compare products' cost as well as environmental impact. ...

The first three product categories for this tool are paperboard container manufacturing, plastic film and sheet manufacturing, and soap and cleaning compound manufacturing.

The browser-based tool allows users to input spending across purchase categories, then calculates CO₂ e[missions] and water impacts and assesses alternative purchasing scenarios for each of the three categories, says Dr. Timothy Smith, associate professor, University of Minnesota, who co-led tool development and created the underlying science based models informing the tool.

[Read more...](#)

Access tool [here](#).

A Story of Health: A Multi-media eBook

[Source: The Collaborative on Health and The Environment, January 2015](#)

Case-based learning has long been used in medical education. Our eBook grounds the science of health in stories of fictional people, their families, and communities to enable readers to explore the risk factors for disease as well as how to prevent disease and promote health and resilience. Using the setting of a family reunion as a backdrop, we explore how multiple environments influence our health across the lifespan.

Learn more about this project and access the interactive eBook [here](#).

See from the Environmental Working Group, "[EWG's Dirty Dozen Guide to Food Additives](#)".

New York City Bans Expanded Polystyrene Food Containers, Opens Market To Alternatives

[Source: Chemical & Engineering News, January 12, 2015](#)

Author: Cheryl Hogue

The market for alternatives to expanded polystyrene food and beverage containers got a significant boost last week when New York City finalized its ban on these materials, despite heavy lobbying by the chemical industry.

The city's Department of Sanitation announced Friday its determination that single-use expanded polystyrene containers cannot be recycled economically. It also found that no market exists now for postconsumer polystyrene foam collected in curbside recycling. "While much of the waste we produce can be recycled or reused, polystyrene foam is not one of those materials," Sanitation Commissioner Kathryn Garcia says.

[Read more...](#)

Nike, NASA Bring Green Chemistry Ideas to Market

[Source: Environmental Leader, January 26, 2015](#)

A low-cost, low-energy process for treating high-salinity industrial wastewater and affordable biodegradable plastics produced from methane are among the 10 winners of a green chemistry challenge co-sponsored by Nike and NASA.

The latest system Challenge initiated by Launch -- an open innovation platform founded by NASA, Nike, the US Agency for International Development and the US Department of State to tackle sustainability challenges -- sought innovations that advance green chemistry to transform materials and manufacturing to advance global economic growth, drive human prosperity and replenish the planet's resources.

[Read more...](#)

n-Butanol from Lignocellulosic Feedstock

[Source: Chemical Engineering, December 1, 2014](#)

The alcohol n-butanol is applied in the production of butyl acrylates to supply the coatings and adhesives industries. It is also used in plasticizers or directly as a solvent. It is commercially produced from propylene and synthesis gas (syngas) by chemical synthesis. Due to the increasing interest in biofuels development, the production of n-butanol through a fermentation process is being revisited and improved. Biobutanol is an attractive renewable fuel that can be produced from the fermentation of sugars derived from agricultural feedstock -- for example, corn and sugarcane -- or from waste lignocellulosic materials, such as corn stover and sugarcane bagasse. In this field, bio-butanol is viewed as an alternative to ethanol, since it fits the existing fuel infrastructure better and exhibits higher energy content, which makes it a more suitable gasoline blending fuel.

[Read more...](#)

Also see from *Chemical Engineering*, "[Sweet Surfactants](#)".

See from *Environmental Leader*, "[Capacity of Emerging Bio-based Material, Chemicals Tech to Rise to 7.4M Metric Tons in 2018](#)".

See from *Chemical & Engineering News*, "[Greener Routes to Polymers](#)".

Flame retardants linked to preterm birth

[Source: The University of Texas Medical Branch, January 28, 2015](#)

Researchers at The University of Texas Medical Branch have determined that maternal exposure to high levels of flame-retardants may be a contributing factor in preterm births.

The new UTMB study by Dr. Ramkumar Menon, assistant professor in the department of obstetrics and gynecology, in collaboration with Winthrop University Hospital and the Kaiser Permanente Southern California Medical Group, found that pregnant women with higher levels of flame-retardant chemicals in their bodies, namely polybrominated diphenyl ethers, were more likely to deliver their babies early than women with lower levels.

[Read more...](#)

See original study in the *Journal of Reproductive Immunology*, "[Does exposure to flame retardants increase the risk for preterm birth?](#)".

Also see from *Chemical & Engineering News*, "[Levels of Persistent Flame Retardants Decline in San Francisco Bay](#)".



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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