

Greenlist Bulletin

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

November 29, 2013

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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.



Cutting Down Pretreatment Waste and Water

[Source: *Products Finishing*, November 1, 2013](#)

Author: Tim Pennington

... "When something works well, you want to stick with it and not change it," says Holland, finishing manager at Husqvarna Outdoor Products' manufacturing plant in McRae, Ga., which makes lawn mowers, garden tillers, snow throwers, and trimmers. . . .

But what finishing managers like Holland face every day is the balance between routinely getting nine and 10 ratings on salt-spray tests, and satisfying his company's desire to become a greener, more eco-friendly manufacturer.

That's what Holland faced when Husqvarna -- the world's largest producer of outdoor power products including robotic lawn mowers, garden tractors, zero turns, snow blowers, chainsaws and trimmers -- launched an initiative at its numerous manufacturing plants around the world to go greener and improve its production systems to reduce the amount of waste being discharged, as well as to use cleaner chemistry. . . .

The first thing noticeable about the re-engineered pretreatment lines at the McRae plant is that there are fewer steps in the wash process. A sealer base treatment was eliminated from the process. . . .

Energy savings is another huge byproduct of the conversion for Husqvarna since they no longer need to heat the tanks for the phosphate.

Chemetall says that using calculations from spray washer manufacturers that design new equipment, a reduction from 130°F to ambient temperature in a typical washer spraying 400 gal/min from a 1,200-gallon tank running two shifts per day with a natural gas cost of \$6 per million BTU, would save almost \$25,000 annually in natural gas.

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Survey Finds Dangerous Toys on Store Shelves

[Source: U.S. Public Interest Research Group, November 26, 2013](#)

Washington, D.C., Nov. 26 -- Dangerous or toxic toys can still be found on America's store shelves, according to U.S. Public Interest Research Group's 28th annual *Trouble in Toyland* report. The survey of hazardous toys found that, despite recent progress, consumers must still be wary when shopping this holiday season.

The report reveals the results of laboratory testing on toys for toxic chemicals including lead, cadmium, and phthalates, all of which can have serious adverse health impacts on the development of children. The survey also found small toys that pose a choking hazard, extremely loud toys that threaten children's hearing, and toy magnets that can cause serious injury if swallowed.

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View [Trouble in Toyland November 2013 report](#).

Polychlorinated Biphenyl Exposures and Cognition in Older U.S. Adults: NHANES (1999-2002)

[Source: Environmental Health Perspectives, November 25, 2013](#)

Authors: Maryse F. Bouchard, Youssef Oulhote, Sharon K. Sagiv, Dave Saint-Amour, and Jennifer Weuve

Background: Polychlorinated biphenyls (PCBs) are ubiquitously present in people because of their resistance to degradation and accumulation in fatty tissues. Data on neurotoxic effects in older adults are limited.

Objective: To examine the cross-sectional association between serum PCB concentrations and cognitive function in older adults from the general U.S. population. . . .

Conclusion: To our knowledge, this is the first study to examine PCB exposure in association with cognition in adults representative of the general U.S. population. The findings support the hypothesis that PCB exposure has adverse cognitive effects, though perhaps only with advanced age.

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See many interesting articles on research into the association between chemical exposure and health effects in the entire [November-December 2013 issue of Environmental Health Perspectives](#).

The Pesticide Connection

[Source: Chemical & Engineering News, November 25, 2013](#)

Author: Lauren K. Wolf

The rats in a room at the University of Pittsburgh regularly get hit with doses of pesticide. But the researchers in J. Timothy Greenamyre's lab don't expose the rodents because of an infestation problem. They give the neurotoxin to the animals to learn more about Parkinson's disease.

After receiving a low daily dose of the pesticide rotenone for a week or two, rats in Greenamyre's lab begin to lose mobility in ways similar to Parkinson's patients. The rodents move at a glacial pace, they have trouble keeping their balance, and their limbs become impossibly stiff. Even the animals' brains develop classic signs of the nervous system disorder: Nerve cells in a region called the substantia nigra accumulate clumps of the protein α -synuclein and die.

It's not unusual to use animal models such as these to probe the molecular causes of Parkinson's, which affects 7 million to 10 million people worldwide, and to test treatments. But their use also raises a question: If a chemical gives lab rats Parkinson's symptoms, might it do the same to humans exposed in the real world?

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Talk of safer chemicals advances at Greenbuild Expo 2013

This year's Greenbuild conference, which just wrapped up in Philadelphia, was a milestone on the path to safer chemicals and building materials.

For the first time this year, an entire day of the U.S. Green Building Council's conference was devoted to presentations about why disclosure and elimination of hazardous chemicals in building products is the way forward.

[Read more...](#)

Also read, from Philly.com, "[GreenSpace: Breathe easy by avoiding chemicals in home items.](#)"

Textiles: Stop the Chemical Overdose!

[Source: Women in Europe for a Common Future, October 2013](#)

Authors: Madeleine Cobbing and Elisabeth Ruffinengo

In this report WECF explores whether textile products containing potential or known chemicals of concern, manufactured within or outside the EU and then placed on the EU market, are adequately regulated to ensure proper consumer information and protection from exposure to hazardous compounds. Indeed, textiles manufacturing is associated with huge consumption of chemicals, some of which are hazardous or potentially hazardous. Some estimate that 4 kg of chemicals are needed to produce 1 kg of t-shirts. One of the challenges is: how to provide an adequate and easily understandable legislative framework for products that are inherently complex while at the same time ensuring a high level of protection of the European consumer? The first Chapter of this report will examine how textile products go through a wide range of processes, which result in a multitude of potential sources of contamination with hazardous chemicals through the whole textiles supply chain, which can also remain in the final consumer product. Chapter II will examine the question of whether current EU regulations are sufficient to protect consumers and the environment from the hazardous chemicals in textile products.

[Read more \(PDF\)...](#)

A Scarcity of Rare Metals Is Hindering Green Technologies

[Source: Yale Environment 360, November 18, 2013](#)

Author: Nicola Jones

With the global push to reduce greenhouse gas emissions, it's ironic that several energy- or resource-saving technologies aren't being used to the fullest simply because we don't have enough raw materials to make them.

For example, says Alex King, director of the new Critical Materials Institute, every wind farm has a few turbines standing idle because their fragile gearboxes have broken down. They can be fixed, of course, but that takes time -- and meanwhile wind power isn't being gathered. Now you can make a more reliable wind turbine that doesn't need a gearbox at all, King points out, but you need a truckload of so-called "rare earth" metals to do it, and there simply isn't the supply. . . .

The move toward new and better technologies -- from smart phones to electric cars -- means an ever-increasing demand for exotic metals that are scarce thanks to both geology and politics. . . .

That's why the Critical Materials Institute, located at the DOE's Ames Laboratory, was created. The institute opened in June, and the official ribbon-cutting was in September. Its mission is to predict which materials are going to become problems next, work to improve supply chains, and try to invent alternative materials that don't need so many critical elements in the first place. The institute is one of a handful of organizations worldwide trying to tackle the problem of critical elements, which organizations like the American Physical Society have been calling attention to for years.

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NASF: OSHA's GHS HazCom Rule

[Source: Products Finishing, November 25, 2013](#)

Author: Christian Richter

NASF members should be ready to comply with new training and other requirements under OSHA's implementation of the Globally Harmonized System (GHS). The deadline for the first round of regulations fell on Dec. 1, 2013.

The GHS is an approach for standardizing and harmonizing the classification and labeling of chemicals. OSHA is now implementing the framework through its revised Hazard Communication Standard (HCS), first published in the Federal Register on March 26, 2012. The new rule aims for a more logical approach to classifying chemicals and communicating hazards on labels and safety data sheets. Companies that regularly handle, store and use hazardous chemicals must periodically update safety data sheets and labels for chemicals covered under the hazard communication standard. Employees must be trained, as well.

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NRDC Lawsuit forces FDA to Take Action on Dangerous Chemical in Soaps

[Source: Natural Resources Defense Council, November 22, 2013](#)

WASHINGTON -- The U.S. Food and Drug Administration, under a court agreement signed yesterday, will end decades of delay and decide how to protect consumers from triclosan, a suspected endocrine disruptor linked to reproductive and developmental harm in laboratory studies.

FDA first proposed in 1978 to remove triclosan from certain consumer products. But because it took no further action, the chemical has been widely used in antimicrobial soaps sold in the United States.

So the Natural Resources Defense Council in 2010 sued FDA in U.S. District Court for the Southern District of New York to force the agency to issue a final rule. The parties reached a settlement and, under a consent decree signed yesterday by U.S. District Judge Alvin K. Hellerstein, the agency committed to taking final action on triclosan used in consumer hand soaps by 2016.

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