

Greenlist Bulletin

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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 jan@turi.org if you would like more information on any of the articles listed here, or if this email is not displaying properly.



GSA Sustainable Facilities Tool

[Source: US General Services Administration \(GSA\), January 2012](#)

Sustainability is best thought of as a process, rather than a thing. US Executive Order 13423 states that sustainability "means to create and maintain conditions, under which humans and nature can exist in productive harmony, that permit fulfilling the social, economic, and other requirements of present and future generations." In order to achieve such conditions, new ways of designing, constructing and operating buildings and facilities must be identified.

The Green Products Compilation (GPC) is presented as an educational tool to facilitate the procurement of green products and services. The products listed are those for which the EPA, DOE, or USDA have issued designations or otherwise provided guidance for environmental or energy attributes.

This interactive tool consolidates and organizes information from these federal green purchasing programs in one place, saving you from researching multiple web sites. It allows Federal purchasers to search, sort, and identify sustainable products and their associated guidance documentation to facilitate green purchasing decisions.

[Go to the GSA Sustainable Facilities Tool](#)

Investigation links deaths to paint-stripping chemical

[Source: Michigan State University, February 23, 2012](#)

The deaths of at least 13 workers who were refinishing bathtubs have been linked to a chemical used in products to strip surfaces of paint and other finishes.

An investigation started by researchers at Michigan State University in 2011 has found that 13 deaths since 2000 - including three in Michigan - involved the use of paint-stripping products containing methylene chloride, a highly volatile, colorless and toxic chemical that is widely used

as a degreaser and paint stripper. The chemical, in addition to being used in industrial settings, is available in many over-the-counter products sold at home improvement stores.

"To use products containing methylene chloride safely, work areas must be well-ventilated, and when levels of methylene chloride exceed recommended exposure limits, workers must use protective equipment," said Kenneth Rosenman, chief of MSU's Division of Occupational and Environmental Medicine in the College of Human Medicine. "In a small bathroom, it is unlikely these products can be used safely."

While it previously was identified as a potentially fatal occupational hazard in furniture strippers and factory workers, a report released today in the Centers of Disease Control and Prevention's Morbidity and Mortality Weekly Report is the first time methylene chloride has been identified as a hazard to bathtub refinishers.

Since its vapors are heavier than air, they likely remain in bathtubs after application, causing increased danger to workers applying a paint-stripping product.

"The extreme hazards of using products with this chemical in bathtub refinishing need to be clearly communicated to employers, workers and the general public," Rosenman said. "Safer methods using alternative products should be recommended."

Rosenman and MSU colleague Debra Chester, who co-wrote the CDC alert released today, notified bathtub refinishers throughout the state of their findings and alerted manufacturers of the product. Efforts also are being made to warn the general public.

Beginning in 2001, MSU's Division of Occupational and Environmental Medicine has received federal funding for the Michigan Fatality Assessment and Control Evaluation program. Each year, the program investigates work-related deaths and identifies ways to prevent them.

As part of that program last year, Chester, an industrial hygienist, identified the 2010 death of a worker using a bathtub refinisher. In that case, the 52-year-old co-owner of a Michigan-based bathtub refinishing company was found unresponsive after using a product marketed for the aircraft industry containing methylene chloride. He later died at a local hospital.

Chester identified a similar Michigan death using the same product earlier in 2010 and another death from several years before. After notifying the National Institute for Occupational Safety and Health, a total of 13 deaths in nine states were identified since April 2000. Another death of an Iowan woman two weeks ago while refinishing a bathtub currently is being investigated as possible exposure to methylene chloride.

As part of the MSU investigation, it is recommended that manufacturers note on products with methylene chloride that they should not be used in applications such as bathtub refinishing. The report also recommends manufacturers consider restricting access to such products.

The report also notes the number of deaths identified likely is an underestimate because national databases do not include self-employed workers or consumers and additional deaths among bathtub refinishers might have been ascribed to heart disease when they were actually caused by methylene chloride.

Food chain transport of nanoparticles affects behaviour and fat metabolism in fish

[Source: PLoS One, February 22, 2012](#)

Authors: Tommy Cedervall, Lars-Anders Hansson, Mercy Lard, Birgitta Frohm, Sara Linse

Nano-sized (10^{-9} - 10^{-7} m) particles offer many technical and biomedical advances over the bulk material. The use of nanoparticles in cosmetics, detergents, food and other commercial products is rapidly increasing despite little knowledge of their effect on organism metabolism. We show here that commercially manufactured polystyrene nanoparticles, transported through an aquatic food chain from algae, through zooplankton to fish, affect lipid metabolism and behaviour of the top consumer.

At least three independent metabolic parameters differed between control and test fish: the weight loss, the triglycerides:cholesterol ratio in blood serum, and the distribution of cholesterol between

muscle and liver. Moreover, we demonstrate that nanoparticles bind to apolipoprotein A-I in fish serum in-vitro, thereby restraining them from properly utilising their fat reserves if absorbed through ingestion. In addition to the metabolic effects, we show that consumption of nanoparticle-containing zooplankton affects the feeding behaviour of the fish. The time it took the fish to consume 95% of the food presented to them was more than doubled for nanoparticle-exposed compared to control fish.

Since many nano-sized products will, through the sewage system, end up in freshwater and marine habitats, our study provides a potential bioassay for testing new nano-sized material before manufacturing. In conclusion, our study shows that from knowledge of the molecular composition of the protein corona around nanoparticles it is possible to make a testable molecular hypothesis and bioassay of the potential biological risks of a defined nanoparticle at the organism and ecosystem level.

[Read the article](#)

The Lorax: blowing smogulous smoke

[Source: Mother Jones, February 23, 2012](#)

Author: Kate Sheppard

Fans of The Lorax have raised concerns that the new big-screen version is neglecting the environmental message of the beloved Dr. Seuss book. The movie doesn't come out until March 2, but the initial trailer and promotional materials ignited a round of complaints on the web.

Now people are having a (rather justified) heart attack about the fact that The Lorax is now being used to cross-promote a new SUV. Earlier this week, Mazda announced that it has partnered with Universal Pictures to promote the new "'Seuss-ified' 2013 Mazda CX-5 crossover SUV." The cross-promotion includes commercials with a cartoon version of the car driving through a valley of Truffula trees. The ads claim that the car is "Truffula tree friendly" -whatever that's supposed to mean, given that the car is a standard fuel-injection-engine SUV. Sure, it's apparently better than other SUVs on the market. But not that good.

Branding professional Jason Bittel was apparently so inspired by this atrocity that he wrote his own Seuss-tastic poem:

A Lorax-branded combustion engine? I mean, seriously?
 Not a hydrogen? Not an electric?
 Not even a Thneed-sponsored cross-breed?
 ...
 Whoever is in charge of branding
 For the Lorax's mula-making machine -
 Have you read the book you're hijacking?
 Did you misinterpret what it means?

Greening fast food packaging: a roadmap to best practices

[Source: Dogwood Alliance, February 23, 2012](#)

"Greening Fast Food Packaging: A Roadmap to Best Practices" outlines eight key attributes of environmentally friendly fast food packaging, and provides simple guidance on how to assess environmental impacts in the supply chain. The report highlights leaders in the fast food industry that have undertaken key initiatives that will help move the entire sector forward. Also included is an action plan to focus corporate sustainability efforts.

Issues associated with greening fast food packaging are complex, and improvement requires an intentional and comprehensive approach. The roadmap reveals straightforward opportunities for companies to take meaningful action rather than greenwashing empty efforts. Leaders in the sector such as McDonald's and Starbucks have proven that with a commitment from the top leadership down, real progress is possible.

For fast food companies, the key place to start is with paper packaging. Paper makes up the

lion's share of fast food packaging, and destructive impacts to forests and communities from paper production are well documented. The work begins when corporate leadership adopts an environmental paper packaging policy that includes reduction in overall use of packaging, increase in use of recycled fiber, and elimination of controversial sources of paper, including fiber from endangered forests, and natural forests converted to tree plantations.

The report highlights key leaders who stepped out from the pack to take initiative on the eight key attributes. For example, Starbucks has committed to reducing the overall use of packaging and pushed the FDA to increase the maximum allowable recycled content in food grade packaging. Another example of leadership came from McDonald's, who adopted an industry leading environmental packaging policy that included both continued progress on the increased use of recycled fiber but also took a comprehensive approach to its non-recycled paper packaging. That commitment eliminates fiber coming from the conversion of natural forests to plantations and gives a clear preference to Forest Stewardship Council (FSC) certified paper, the only paper certification broadly endorsed by the environmental community. These initiatives involved multiple stakeholders, from packaging suppliers to environmental organizations, and set the new standard for excellence.

In addition to highlighting the key issues associated with paper packaging - reduction, increased use recycled fiber, and elimination of controversial paper sources - the report highlights other attributes for across the board greening of a company's packaging. The other key attributes include corporate leadership, utilizing a full life cycle approach, increasing in-store recycling and recovery, eliminating toxic inks and labels, and managing the overall carbon footprint.

[Download the report](#)



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Greenlist Bulletin is compiled by:

Jan Hutchins
Manager of the TURI Library
Toxics Use Reduction Institute
University of Massachusetts Lowell
600 Suffolk St., Woburn Mill
Lowell MA 01854
978-934-3390
978-934-3050 (fax)
jan@turi.org