

Greenlist Bulletin

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

August 7, 2015

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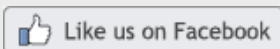
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This is the bi-weekly bulletin of the TURI Library at the University of Massachusetts Lowell. Greenlist Bulletin provides previews of recent publications and websites relevant to reducing the use of toxic chemicals by industries, businesses, communities, 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.



New report uncovers elevated breast cancer risk for working women

[Source: Breast Cancer Fund, August 6, 2015](#)

SAN FRANCISCO -- A first of its kind review of the scientific literature on women workers and breast cancer, released by the Breast Cancer Fund in time for Labor Day, uncovers more than 20 occupations associated with considerably increased risk of breast cancer compared to the risk for the general population.

"Because workers are often exposed to carcinogenic or toxic substances at regular doses for long periods of time, they are the modern-day canaries in the coal mine," said Jeanne Rizzo, president and CEO of the Breast Cancer Fund. "We are confident that there is a better way forward, and that a cancer-free economy is within our grasp. It's time to put breast cancer out of work." ...

"The authors have produced a comprehensive and thoroughly documented review of the state of the evidence that should be immensely valuable to advocates, students and policy-makers. The Breast Cancer Fund deserves enormous credit for their leadership and vision in illuminating this important part of the breast cancer story." -Dick Clapp, Professor Emeritus of Environmental Health, Boston University School of Public Health and Adjunct Professor at the University of Massachusetts Lowell.

[Read more...](#)

Access report, "[Working Women and Breast Cancer: The State of the Evidence](#)".

Need Statement & Development Criteria for New Preservatives for Personal Care & Household Products

[Source: Green Chemistry & Commerce Council's \(GC3\) Collaborative Innovation Project Group, 2015](#)

The GC3's Collaborative Innovation Project on Preservatives was launched with two goals in mind:
1. To accelerate the commercialization of new, safe, effective preservative systems for personal

care and household products; and

2. To create a new model of pre-commercial collaboration whereby companies with common needs for new, safe chemicals, materials, or other technologies, can accelerate the development and scale-up of these technologies.

This document was developed through a collaborative and iterative process in order to:

- Interest, motivate, and guide R&D within the chemical supplier, entrepreneurial, and academic communities to start and/or accelerate research, development and scale-up new, safe preservatives; and
- To create a set of criteria to guide collaborative sponsorship of technology searches, R&D, testing, and evaluation.

[Read more...](#)

Access full [publication](#).

Worried about PVC and BPA? A toxic-free back-to-school shopping guide.

Source: [The Washington Post, July 29, 2015](#)

Author: Michael Alison Chandler

When picking out school supplies, children often clamor for their favorite cartoon characters or colors, but health advocates are urging parents to consider the safety of products before moving to the checkout line.

Some plastics that have been linked to health problems still can be found in many backpacks, lunchboxes and water bottles marketed to children.

"We are living in an age of plastics," said Charles Moore, founder of Algalita, an organization that raises awareness about plastic pollution and its effect on marine life and ecosystems. ...

PVC, or polyvinyl chloride, also known as vinyl, contains chemical additives including phthalates that research has linked to asthma, learning disabilities, diabetes and other chronic health problems. ...

Public-health advocates recommend buying backpacks made of natural fibers and avoiding the shiny plastic models that often contain PVC. It's harder to find binders that are not made of vinyl, but they suggest looking for brands that are PVC-free.

[Read more...](#)

View the Consumer Product Safety Commission page on [Phthalates](#).

See Center for Health, Environment & Justice, "[2013 Back-to-School Guide to PVC-Free School Supplies](#)".

Also see from *Ensia*, "[The Search for Sustainable Plastics](#)".

'Regrettable substitutions' fail to knock hazardous chemicals out of products

Source: [Newsworks, July 30, 2015](#)

Author: Karen Shakerdge

If you walk into the supermarket and pick up some microwave popcorn boxes these days, you'll probably see the words "diacetyl free" written near the ingredients. But this wasn't always the case.

Diacetyl is a chemical historically used to make the butter flavor added into movie theater popcorn, microwave popcorn, baked goods and just about anything that promises a buttery taste. But there was a problem with diacetyl -- workers handling the chemical started developing serious respiratory problems. ...

In reaction, some big food companies vowed to stop using it, and they did. But some replaced it with a chemical called 2,3 pentanedione, which could be just as hazardous, according to a report released earlier this month by The National Institute For Occupational Safety and Health. Swapping one hazardous chemical in for another is what experts call a regrettable substitution.

[Read more...](#)

Also see report from the National Institute for Occupational Safety & Health, "[Best Practices: Engineering Controls, Work Practices, and Exposure Monitoring for Occupational Exposures to Diacetyl and 2,3-Pentanedione](#)".

Shallow Fracking Wells May Threaten Aquifers

[Source: Chemical and Engineering News, July 31, 2015](#)

Author: Jeff Johnson

Several thousand near-surface hydraulic fracturing, or fracking, operations for oil and natural gas production in the U.S. pose a potentially significant risk of contaminating drinking water sources, according to a new analysis. This first national assessment of fracking focused on well depth raises particular concerns about fracking wells less than a mile deep. ...

Fracking uses water, sand, and an often-proprietary blend of chemicals, which may include benzene, toluene, and other hydrocarbons. Oil and natural gas drilling companies force the mix underground under high pressure to fracture pockets of rock and release oil and gas trapped within, which they draw to the surface.

[Read more...](#)

See original article in *Environmental Science & Technology*, "[The Depths of Hydraulic Fracturing and Accompanying Water Use Across the United States](#)".

Government of Canada: Phthalate Substance Grouping

[Source: Government of Canada, July 31, 2015](#)

Certain phthalate substances are among those identified as priorities for action for the second phase of the Chemicals Management Plan (CMP). The selection of the phthalate substances for action was based on the categorization process completed in 2006, and on information received as part of the first phase of the CMP. Fourteen phthalate substances were included in this substance grouping, and were selected for a number of different reasons: some have been identified as potentially associated with reproductive and developmental effects; some have a wide range of consumer applications; some are associated with potential ecological effects of concern; and some have been identified as priorities internationally.

Due to the possibility that some phthalate substances may have common health effects of concern, the potential for cumulative risk from combined exposure to these substances was addressed by expanding the scope of the Phthalates Grouping from the original 14 phthalates to include an additional 14 phthalates, including three previously assessed under the Canadian Environmental Protection Act, 1999 (CEPA 1999) (dibutyl phthalate [DBP], butyl benzyl phthalate [BBP], and diethyl hexyl phthalates [DEHP]). Other phthalates on the Domestic Substances List, or that have been notified for use in Canada under the New Substances Notification Regulations (Chemicals and Polymers) may also be considered in the cumulative risk assessment.

[Read more...](#)

See their Stakeholder Technical Workshop Document, "[Approach for Using Chemical Categories and Read-Across to Address Data Gaps for Effects on the Developing Male Reproductive System](#)".

Also see from *Consumer Reports*, "[Can your floor make you sick?](#)".

The slow-chemistry movement

[Source: Nature, August 4, 2015](#)

Author: XiaoZhi Lim

Cristina Mottillo is in no rush. She pours finely ground white powder into a Petri dish, carefully rolls it flat with the side of a small glass vial, then seals it into a chamber where the heat and humidity are like those on a sweltering summer day in the tropics.

"Now," she says, "we wait."

Over the next four days, with no further effort from Mottillo, the three chemicals in that powder will gradually turn into ZIF-8: a stable, porous compound called a metal-organic framework that could find widespread use in carbon capture and storage, and that is worth more than 100 times the raw materials' original value. "The reactants do all the work," says Mottillo, a chemistry PhD student at McGill University in Montreal, Canada.

This is a radical departure from standard chemical-synthesis methods, which typically involve dissolving, heating and stirring ingredients in a solution to encourage them to react quickly. These techniques are fast and well understood, but they tend to consume large amounts of chemicals and energy, and pose a major environmental challenge. An estimated 50-80% of all chemical waste produced by industry and university labs consists of solvents left over from synthesis, separation and purification.

[Read more...](#)

OSHA seeks to reduce exposure to highly useful, highly toxic metal

[Source: The Center for Public Integrity, August 6, 2015](#)

Author: Jamie Smith Hopkins

The metal beryllium is an engineer's dream: Lightweight yet strong, capable of handling harsh environments underwater and out in space.

It's also a medical nightmare. Minute amounts of its dust and fumes can trigger a disabling, sometimes deadly lung disease. It can cause cancer, too.

The Occupational Safety and Health Administration said it will propose Thursday to sharply tighten the level of beryllium to which workers can be legally exposed, belatedly responding to decades of studies showing that the current OSHA limit does not protect people's lungs.

[Read more...](#)

Access the unpublished Proposed Rule by the Occupational Safety and Health Administration, "[Occupational Exposure to Beryllium and Beryllium Compounds](#)".

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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