

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.



Home Depot Says It Will Phase Out Chemical Used in Vinyl Flooring

[Source: New York Times, April 22, 2015](#)

Author: Rachel Abrams

Facing pressure from consumer groups, Home Depot said it would discontinue use of a potentially harmful chemical in its vinyl flooring by the end of the year.

The retailer is asking about a half-dozen suppliers to phase out their use of ortho-phthalates, according to Stephen Holmes, a spokesman. Most of Home Depot's flooring does not contain the chemicals at all, Mr. Holmes said, adding that the move would affect about 15 percent of the company's vinyl products.

"Phthalates are one of the top 10 groups of chemicals that we're concerned with right now," said Jeff Gearhart, the research director for HealthyStuff.org, a research group affiliated with the nonprofit organization Ecology Center. "We think it's an avoidable hazard simply because there are alternatives on the market."

Ortho-phthalates are used as plasticizers, meaning that they can make products more flexible. Consumer safety advocates say there is a growing body of evidence linking some phthalates to reproductive and developmental problems, particularly in male babies.

[Read more...](#)

Also see from *Environmental Science & Technology*, "[Emission of Phthalates and Phthalate Alternatives from Vinyl Flooring and Crib Mattress Covers: The Influence of Temperature](#)" and from the *Journal of Exposure Science & Environmental Epidemiology*, "[Vinyl flooring in the home is associated with children's airborne butylbenzyl phthalate and urinary metabolite concentrations](#)".

Work-Related Asthma Cluster at a Syntactic Foam Manufacturing Facility -
Massachusetts 2008-2013

[Source: Centers for Disease Control and Prevention, April 24, 2015](#)

Authors: Megan Casey, MPH, Marcia L. Stanton, Kristin J. Cummings, MD, Elise Pechter, MPH, Kathleen Fitzsimmons, MPH, Ryan F. LeBouf, PhD, Christine R. Schuler, PhD, Kathleen Kreiss, MD

Work-related asthma is asthma that is caused or exacerbated by exposure to specific substances in the workplace [...]. Approximately 10%-16% of adult-onset asthma cases are attributable to occupational factors, and estimates of asthma exacerbated by work range from 13% to 58% [...]. During 2008-2012, the Massachusetts Department of Public Health received nine reports of work-related asthma among workers at a facility that manufactured syntactic foam used for flotation in the offshore oil and gas industry. These reports and a request from facility employees led to a CDC health hazard evaluation during 2012-2013 in which CDC reviewed records, toured the facility, and administered a questionnaire to current employees. Investigators found that workers' risk for asthma increased substantially after hire, possibly because of known asthma triggers (i.e., asthmagens) used in production. The company has since initiated efforts to reduce employee exposures to these substances. This cluster of work-related asthma was identified through CDC-funded, state-based surveillance and demonstrates complementary state and federal investigations.

[Read more...](#)

Report Demonstrates Over \$5.4 Billion in Economic Benefits from Pollution Prevention

[Source: Great Lakes Region Pollution Prevention Roundtable, April 22, 2015](#)

Author: Laura Barnes

The Clear Choice for Environmental Sustainability: Pollution Prevention Results from 2010 to 2012 presents available information on the achievements of state and local P2 programs for the calendar years 2010 to 2012. The Report was produced by the National Pollution Prevention Roundtable (NPPR) based upon the results shared by 90 pollution prevention (P2) programs in the United States.

The Report shows that P2 projects yielded about \$5.4 billion in economic benefits during the three year period. During this three-year period, waste was reduced by 8.9 billion pounds, which is the amount of waste produced by 5.5 million people annually. 8.8 billion gallons of water and 1.4 billion kWh of electricity were also conserved. This study affirms that pollution prevention results in conservation of valuable resources and significant waste reductions.

[Read more...](#)

Access report [here](#).

Chemical-Free Process Boosts Paper Plant's Competitiveness

[Source: Environmental Leader, April 14, 2015](#)

Cascades, which produces packaging and tissue products composed mainly of recycled fibers, has invested \$26 million in a new chemical-free technology at its Norampac - Cabano facility.

The company says the biorefinery process used to extract hemicellulose, a cellulosic sugar with high value-added potential, from wood chips is a Canadian first. ...

Hemicellulose, a natural polymer found in plant cell walls, presents [a] myriad [of] opportunities ranging from power generation to biofuels such as ethanol, as well as the production of natural sugar-based value-added products.

[Read more...](#)

Also see from the *Boston Globe*, "[Paper mills find new ways to survive](#)", and from Mohawk, "[Mohawk Announces Plans for a New Multi-Million Dollar Envelope Manufacturing Facility in Western Massachusetts](#)".

Towards a method for cytotoxicity screening of nanomaterials

[Source: SafeNano, April 13, 2015](#)

The results of an inter-laboratory comparison study on a method for assessing the cytotoxicity of

nanomaterials have been published by researchers from the European Commission Joint Research Centre (JRC). This is an important step towards a harmonised method for toxicity screening of nanomaterials in relation to nanosafety.

The Colony Forming Efficiency (CFE) assay is an in vitro (animal free) method, used for the cytotoxicity testing of chemicals. JRC scientists adapted and optimised the CFE assay for the testing of nanomaterials. The performance of the method was tested by twelve laboratories from France, Italy, Japan, Poland, Republic of Korea, South Africa and Switzerland in the frame of OECD Working Party of Manufactured Nanomaterials (WPMN). Through this inter-laboratory comparison study coordinated by the JRC, it could be shown that the assay protocol is well defined and is easily and reliably transferable to other laboratories. Furthermore, the CFE assay has several advantages over commonly used in vitro cytotoxicity assays, as it avoids test interferences and is particularly sensitive. Therefore, according to the JRC, the CFE assay can be recommended as a first choice method within a battery of in vitro methods for the early toxicity screening of nanomaterials.

[Read more...](#)

Access report, "[Interlaboratory comparison study of the Colony Forming Efficiency assay for assessing cytotoxicity of nanomaterials](#)".

Improving Environmental Risk Assessment of Human Pharmaceuticals

[Source: *Environmental Science & Technology*, April 6, 2015](#)

Authors: Marlene Ågerstrand, Cecilia Berg, Berndt Björlenius, Magnus Breitholtz, Björn Brunström, Jerker Fick, Lina Gunnarsson, DG Joakim Larsson, John P Sumpter, Mats Tysklind, and Christina Rudén

This paper presents 10 recommendations for improving the European Medicines Agency's guidance for environmental risk assessment of human pharmaceutical products. The recommendations are based on up-to-date, available science in combination with experiences from other chemical frameworks such as the REACH legislation for industrial chemicals. The recommendations concern: expanding the scope of the current guideline; requirements to assess the risk for development of antibiotic resistance; jointly performed assessments; refinement of the test proposal; mixture toxicity assessments on active pharmaceutical ingredients with similar modes of action; use of all available ecotoxicity studies; mandatory reviews; increased transparency; inclusion of emission data from production; and a risk management option. We believe that implementation of our recommendations would strengthen the protection of the environment and be beneficial to society. Legislation and guidance documents need to be updated at regular intervals in order to incorporate new knowledge from the scientific community. This is particularly important for regulatory documents concerning pharmaceuticals in the environment since this is a research field that has been growing substantially in the last decades.

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ECHA revising rules on dossier completeness checks

[Source: *Chemical Watch*, April 22, 2015](#)

[European Chemicals Agency] is reviewing the rules on completeness checks of REACH dossiers and plans to launch them alongside the latest version of [IUCLID], next year.

The agency explained current state of play on these changes, in a paper presented to last month's meeting of Competent Authorities on REACH and CLP (Caracal).

[Read more...](#)

Also see, "[Green chemistry: the role of EU regulation](#)".

A New Documentary Probes the Vast Human Experiment of Unregulated Chemicals

[Source: *Newsweek*, April 17, 2015](#)

Author: Zoe Schlanger

The next time you buy a stick of deodorant or a bottle of dish soap, consider this: The Environmental Protection Agency (EPA) has tested and published data on only approximately 200 of the roughly 83,000 chemicals legally used to make products in the U.S., according to a California Senate

review from 2010.

Meanwhile, food manufacturers can put thousands of additives into their products without approval from the Food and Drug Administration (FDA) because of a loophole in a decades-old food additive law, the Center for Public Integrity reported this week.

What does this mean? According to the producers of a new documentary, it means we play the role of test subjects in a vast human experiment.

[Read more...](#)

Eating fruits and vegetables with high pesticide residues linked with poor semen quality

[Source: Harvard School of Public Health, March 30, 2015](#)

Boston, MA -- Men who ate fruits and vegetables with higher levels of pesticide residues -- such as strawberries, spinach, and peppers -- had lower sperm count and a lower percentage of normal sperm than those who ate produce with lower residue levels, according to a new study by researchers at Harvard T.H. Chan School of Public Health. It is the first study to look at the connection between exposure to pesticide residues from fruits and vegetables and semen quality. ...

"To our knowledge, this is the first report to link consumption of pesticide residues in fruits and vegetables, a primary exposure route for most people, to an adverse reproductive health outcome in humans," said Jorge Chavarro, assistant professor of nutrition and epidemiology and the study's senior author.

Multiple studies have shown that consuming conventionally grown fruits and vegetables results in measurable pesticide levels in urine. Other studies have uncovered associations between occupational and environmental exposure to pesticides and lower semen quality. But only a few studies have linked consumption of pesticide residues in food to health effects, and none had looked at the effects on semen quality.

[Read more...](#)

See original study in *Human Reproduction*, "[Fruit and vegetable intake and their pesticide residues in relation to semen quality among men from a fertility clinic](#)".

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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