Greenlist BULLETIN



Toxics Use Reduction Institute

September 8, 2017

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.

Analysis of PFASs and TOF in products

Source: Nordic Council of Ministers, September 6,

<u>2017</u>

Authors: Daniel Borg and Jenny Ivarsson

Per- and polyfluorinated substances (PFASs) are a large group of substances used in industrial and consumer applications. There are thousands of PFASs on the global market, for many of which there is little information on their use. This study is a follow-up of a NORAP project from 2015 where different household products were analysed for PFASs. Here we further analysed these products for total organic fluorine (TOF) together with new analyses for individual PFASs and TOF in product types that are known to or suspected to contain PFASs. The analyses of new products showed that PFASs are widely used. The comparisons between analysed individual PFASs and TOF concentrations showed that for most samples the detected individual PFAS constituted only a very minor part of the TOF, illustrating large data gaps in our knowledge on which PFASs that are being used in these products.

Read more...

Access the full report here.

See article in *Chemical Watch*, "Most PFASs in consumer products 'from unknown sources'".

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Manufacturers Share Chemical Data With EPA to Make Safety Case

Source: Bloomberg BNA - Daily Environment Report, September 6, 2017

Author: Pat Rizzuto

The BASF Corp., the Dow Chemical Co. and Honeywell International Inc. are sharing chemical data with the EPA in a bid to persuade agency scientists that the compounds they make or use are safe and should stay on the market.

During the next few years, the Environmental Protection Agency will study and consider regulations for the 10 compounds that are under review if the agency determines they are unsafe -- part of the agency's implementation of last year's amended toxics law. At stake are hundreds of uses of chemicals in factories, households, and construction sites that hinge on EPA's upcoming reviews. ...

In meeting with the EPA, some companies are making the case that certain chemicals are small impurities in the manufacturing process and thus can be safely ignored. Others are providing use and exposure information on major industrial products such as solvents used in manufacturing. Still others are opting not to share data with the EPA, instead waiting to learn more about the process based on this first group of 10 reviews. All have an EPA deadline of Sept. 19 to submit information for this first round of chemical risk reviews.

By the end of the year, the EPA will craft blueprints for studying the health and ecological risks of 10 chemicals that will rely in part on the companies' use, exposure, and toxicity data they share with the agency. The EPA will augment this data with studies in its own databases, the scientific literature, and other sources. Those 10 blueprints also will include the relevant exposure scenarios, human populations, and environmental conditions of interest.

Read more...

Touching thermal-paper receipts could extend BPA retention in the body

Source: Chemical & Engineering News, September 4, 2017

Authors: Deirdre Lockwood

When people handle receipts printed on thermal paper containing the endocrine disruptor bisphenol A (BPA), the chemical could linger in the body for a week or more ... Jonathan W. Martin of Stockholm University and Jiaying Liu of the University of Alberta asked six male volunteers to handle paper containing isotopically labeled BPA for five minutes. ... Ingested BPA is rapidly metabolized in the liver and quickly excreted, Martin says. But BPA absorbed through the skin is probably metabolized much less efficiently, which could lead to a longer and more toxic exposure.

Read more...

See original article in *Environmental Science & Technology*, "Prolonged Exposure to Bisphenol A from Single Dermal Contact Events".

Trees with a probiotic boost clean up a carcinogen

Source: Chemical & Engineering News, September 7, 2017

Author: Deirdre Lockwood

Planting poplar trees that harbor a secret weapon -- pollutant-busting microbes -- could help clean up sites contaminated with the carcinogen trichloroethylene, a new study

shows... In the first field trial of this approach at a Superfund hazardous waste site, poplar trees boosted by bacteria within their tissues brought groundwater concentrations of TCE to below the maximum contaminant level for drinking water set by the U.S. Environmental Protection Agency.

TCE is used as a solvent and degreaser in industrial processes, and was recently declared a human carcinogen. It contaminates the soil or water of more than 1,000 Superfund sites around the U.S. Current methods to remove it from groundwater include sorbing it onto activated carbon or driving the pollutant out of water with a stream of air. But these methods are so expensive, says Sharon L. Doty of the University of Washington, that many site managers choose to monitor and isolate polluted areas instead of cleaning them up. Now she and her colleagues have developed a much cheaper approach.

Read more...

See original article in *Environmental Science & Technology*, "Enhanced Degradation of TCE on a Superfund Site Using Endophyte-Assisted Poplar Tree Phytoremediation".

Proctor & Gamble to reveal all fragrance ingredients by 2020

Source: Chemical Watch, September 4, 2017

Author: Tammy Lovell

US consumer goods giant, Procter & Gamble, has announced it will reveal the fragrance ingredients, down to 0.01% of content, for all products sold in the US and Canada by the end of 2019.

The initiative will include more than 2,000 products across 65 brands.

Consumers will first be offered details about Tide laundry detergents, Herbal Essences shampoos, Febreze air fresheners and Olay skin care products, in which P&G says there is "the greatest consumer interest". Additional product categories and geographies will be added over time.

P&G will also include information on where else these ingredients can be found, such as in fruits, food and other products.

Read more...

Also see from the U.S. EPA, "Suspect Screening of Chemicals in Consumer Products".

A Retrospective Analysis of Agricultural Herbicides in Surface Water Reveals Risk Plausibility for Declines in Submerged Aquatic Vegetation

Source: Toxics, September 6, 2017

Authors: Kelly Powell, W. Gregory Cope, Catherine LePrevost, Tom Augspurger, Annette McCarthy, and Damian Shea

The Albemarle-Pamlico Estuarine System (APES) is the second largest estuarine system within the mainland of the United States and is estimated to have lost about half of its submerged aquatic vegetation (SAV) over the past several decades. The issue of herbicide runoff and subsequent toxic effects to SAV is important because of the extensive agricultural production that occurs in the APES region. The aim of this study was to conduct a retrospective analysis of herbicide influx to waters of the APES region during the time period of documented SAV declines and to compare the measured concentrations to SAV toxicity thresholds and changes in agricultural land use. Surface

water grab samples were collected at 26 sites in the APES region during May through July 2000. The most consistently measured herbicides were alachlor, atrazine, and metolachlor with geometric mean concentrations ranging from 29 to 2,463 ng/L for alachlor, 14 to 7,171 ng/L for atrazine, and 17 to 5,866 ng/L for metolachlor. Concentrations of alachlor, atrazine, and metolachlor measured in water samples from the APES region in 2000 exceeded several of the established benchmarks, standards, or guidelines for protection of aquatic plants. Although this evaluation was of point-in-time herbicide samples (year 2000) and not analyzed for all possible herbicides used at the time, they were taken during the period of SAV declines, reveal the plausibility of exposure risk to SAV, and suggest that herbicide runoff should be studied along with other variables that influence SAV growth and distribution in future studies.

Read more...

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