Greenlist Bulletin

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

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information on any of the articles listed here, or if this email is not displaying properly.

EPA Takes Steps to Allow Restriction of Imports of Harmful Category of Chemicals used in Carpets

mary@turi.org if you would like more

Source: U.S. Environmental Protection Agency, September 30, 2013

WASHINGTON - The U.S. Environmental Protection Agency (EPA) is finalizing a rule that will allow the agency to restrict imports of potentially harmful perfluorinated chemicals that could be used in carpets. The regulation will require companies to report to EPA all new uses, including in domestic and imported products, of these chemicals once used for soil and stain resistance in carpets. These chemicals have been shown to persist in the environment and bioaccumulate in humans and animals -- they represent a potential threat to American's health. This action follows the U.S. chemical industry's voluntary phase out of these chemicals and a range of actions by EPA to address concerns with these chemicals. . . .

The final rule issued today, known as a Significant New Use Rule under the Toxic Substances Control Act, requires that anyone who intends to manufacture (including import) or process any long-chain perfluoroalkyl carboxylic (LCPFAC) chemicals for use in carpets or carpet products submit a notification to EPA at least 90 days before beginning the activity, providing the agency with an opportunity to review and, if necessary, place limits on manufacturers or processors who intend to reintroduce or import products with these chemicals.

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Yale project targets new wave of safer chemicals

Source: Phys.org, October 2, 2013

Author: Kevin Dennehy

Yale scientists will lead a new four-year, \$4.4 million project intended to promote the design of a new generation of chemicals and materials less toxic to humans and the environment.

The team, which also involves scientists from three other universities, will develop tools that help molecule designers predict toxic hazards when evaluating new and existing chemicals and modify their designs to reduce risks while maintaining efficacy.

"For the last two centuries, chemists have been increasingly able to design molecules, chemicals and materials so that they perform particular functions, from color to adhesion to conductivity," said Paul Anastas, a professor of chemistry at the Yale School of Forestry & Environmental Studies and the project's principal investigator. "One thing that we haven't been able to do is to design chemicals so that they have reduced toxicity, reduced adverse impact on humans and the environment. This project aims to get an understanding of the inherent basis of these adverse consequences."

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SAC, Outdoor Industry Association Launch Chemical Management Tool

Source: Environmental Leader, October 2, 2013

The Chemicals Management Working Group (CMWG) has developed a tool to help chemical suppliers and purchasers identify and choose ingredients that meet quality expectations while minimizing impacts on humans and the environment.

The Chemicals Management Module (CMM), also called the Chemicals Management Framework, allows businesses to assess chemical management practices within their companies and supply chains against shared industry benchmarks for best practices. It can also help companies develop a roadmap for integrating a chemicals management system into their operations, including highlighting opportunities for improvement and external resources, tools and services that can help firms achieve their chemicals management action plans.

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[Ohio] Shale drillers must report chemicals

Source: The Columbus Dispatch, September 30, 2013

Author: Spencer Hunt

Oil and gas companies are being told for the first time to give county officials and local fire departments information about the toxic chemicals drillers use to fracture shale.

Ohio officials sent a memo this month notifying companies that a federal right-to-know law trumps a 2001 state law that allowed them to send the information exclusively to the Ohio Department of Natural Resources.

The memo "puts oil and gas companies on notice that they will have to comply with the federal requirements," said Chris Abbruzzese, a spokesman for the Ohio Environmental Protection Agency.

The decision marks a victory for environmental advocates, who have long demanded that more light be shed on the chemicals used in fracking, a process in which millions of gallons of water, sand and chemicals are pumped underground to crack shale and free oil and gas trapped within it.

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High Levels of Organophosphate Flame Retardants in the Great Lakes Atmosphere

Source: Environmental Science & Technology Letters, September 19, 2013
Authors: Amina Salamova, Yuning Ma, Marta Venier, and Ronald A. Hites

Levels of 12 organophosphate flame retardants (OPs) were measured in particle phase samples collected at five sites in the North American Great Lakes basin from March 2012 to December 2012 (inclusive). The target compounds were three chlorinated OPs [tris(2-chloroethyl) phosphate (TCEP), tris(1-chloro-2-propyl) phosphate (TCPP), and tris(1,3-dichloro-2-propyl) phosphate (TDCPP)], three alkyl phosphates [tri-n-butyl phosphate (TnBP), tris(butoxyethyl) phosphate (TBEP), and tris(2-ethylhexyl) phosphate (TEHP)], and six aryl phosphates [triphenyl phosphate (TPP), tri-o-tolyl phosphate (TOTP), tri-p-tolyl phosphate (TPTP), tris(3,5-dimethylphenyl) phosphate (TDMPP), tris(2-isopropylphenyl) phosphate (TIPPP), and tris(4-butylphenyl) phosphate (TBPP)]. Total OP (Σ OP) atmospheric concentrations ranged from 120 ± 18 to 2100 ± 400 pg/m3 at the five sites, with

the higher Σ OP levels detected at Cleveland and Chicago. Σ OP concentrations at these urban sites were dominated by the chlorinated OPs (TCEP, TCPP, and TDCPP), with the sum of these three compounds comprising 51 ± 6 and 65 ± 12% of Σ OP concentrations at these two sites, respectively. Nonhalogenated OP compounds were major contributors to Σ OP concentrations at the remote sites, with the sum of all nine nonhalogenated OP concentrations comprising 70 ± 21 and 85 ± 13% of the Σ OP concentrations at Eagle Harbor and Sleeping Bear Dunes, respectively. On average, these Σ OP concentrations are about 2-3 orders of magnitude higher than the concentrations of brominated flame retardants in similar samples.

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Also read the summary news article from *Chemical & Engineering News*, "Alternative Flame Retardants Detected In Outdoor Air."

Comprehensive Environmental Assessment Applied to Multiwalled Carbon Nanotube Flame-Retardant Coatings in Upholstery Textiles: A Case Study Presenting Priority Research Gaps for Future Risk Assessments (Final Report)

Source: U.S. Environmental Protection Agency, September 2013

This final report presents a case study of multiwalled carbon nanotubes (MWCNTs); it focuses on the specific example of MWCNTs as used in flame-retardant coatings applied to upholstery textiles. This case study is organized around the comprehensive environmental assessment (CEA) framework, which structures available information pertaining to the product life cycle, environmental transport and fate, exposure-dose in receptors (i.e., humans, ecological populations, and the environment), and potential impacts in these receptors. A group of experts representing multiple disciplines and multiple sector perspectives used an earlier draft of the case study in conjunction with a structured workshop process to identify and prioritize research gaps that, if pursued, could inform future MWCNT assessment efforts. The final report is not a health, risk, or exposure assessment and as such does not draw conclusions about potential risks, or present an exhaustive review of the literature. Rather, it presents the MWCNT research priorities that experts identified in this application of CEA in order to aid research planning throughout the scientific community. The outcomes of these research efforts may subsequently inform long-term MWCNT assessments.

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Study to track firefighter exposure to chemicals

Source: Maine Morning Sentinel, October 4, 2013

Author: Paul Koenig

AUGUSTA -- Frank Ober, a former firefighter and now a selectman in Whitefield, said he remembers when having the dirtiest turnout suit after a fire was a point of pride for firefighters.

The times have changed, and research now shows firefighters are at a greater risk of developing cancer because of exposure to toxic chemicals while fighting fires.

A recently published study of firefighters in California from Dr. Susan Shaw, an environmental scientist based in Blue Hill, found higher levels of chemicals from commercial flame retardants and other household materials than expected, increasing firefighters' risk of developing cancer later in life.

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