

# Greenlist Bulletin

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

January 31, 2014

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## BPA Alternatives in Thermal Paper Partnership

[Source: U.S. Environmental Protection Agency, January 29, 2014](#)

On January 29, 2014, through its Design for the Environment (DfE) program, EPA released a final alternatives assessment for bisphenol A (BPA) in thermal paper.

One of BPA's uses is as a developer in thermal paper, and this assessment evaluates potential hazards associated with 19 thermal paper developers that are likely to be functional alternatives to BPA. Thermal paper systems include a developer and other components, such as dyes and sensitizers, which are described in more detail below. In addition, the assessment provides background information about how thermal paper is made and considerations for choosing an alternative.

[Read more...](#)

Read the final report, "[Bisphenol A Alternatives in Thermal Paper](#)" (PDF).

The DfE program also released "[An Alternatives Assessment for the Flame Retardant Decabromodiphenyl Ether \(DecaBDE\)](#)" (PDF), which evaluates and compares potential hazards associated with decaBDE and 29 alternatives.

The DfE program also recently added 50 chemicals to its [Safer Chemical Ingredients List](#), bringing the number of safer fragrance chemicals to 150 and the total number of safer chemicals to nearly 650.

Also see, from the *Great Lakes Echo*, "[Chemistry getting greener at Michigan companies, universities.](#)"

## Flame-retardant maker sues over new Calif. law

[Source: SFGate, January 17, 2014](#)

Author: Stephanie M. Lee

A leading manufacturer of flame retardants filed suit Thursday in an attempt to derail a new California law that seeks to keep the chemicals it makes out of upholstered furniture sold in the state.

The lawsuit filed in Sacramento by Chemtura Corp. argues that the law puts consumers at risk by changing a 4-decades-old flammability test that upholstered furniture must pass to be sold in California.

The intent of the change, which took effect this year, is to discourage furniture manufacturers from using flame retardant chemicals that have been linked to reproductive problems, developmental delays and cancer, as well as health effects that have not yet been studied. But Chemtura says the new law will risk lives.

[Read more...](#)

### At Least 33 States to Consider Toxics Policies in 2014

[Source: Safer States, January 28, 2014](#)

This year, at least 33 states -- more than half the nation -- will step up as defenders of public health. They will take the toxic bull by the horns and consider policies addressing the untested and toxic chemicals in everyday products.

Here's the bull: Toys, clothes, bedding, baby shampoo -- all can contain chemicals toxic to the brain and body. We've known for years that the federal law meant to protect us (the 1976 Toxic Substances Control Act) is outdated, allowing untested chemicals and known carcinogens, hormone disruptors, heavy metals and other toxics into the products we use every day.

Although Congress has failed to fix the law, states have established over 200 policies in the last ten years to protect people from hazardous chemicals in consumer products.

2014 is proving to continue this tradition of protection: at least 33 states are considering policies. Some would change disclosure rules for manufacturers, so that concerned consumers will know what chemicals are in their products. Some would phase out the use of chemicals like bisphenol A, formaldehyde and toxic flame retardants. And just a few weeks into some sessions, momentum is strong -- like in Washington State, where a bill is already moving to restrict certain flame retardants.

[Read more...](#)

Effective January 31, 2014, the California Environmental Protection Agency's Office of Environmental Health Hazard Assessment is adding trichloroethylene to its list of chemicals known to cause reproductive toxicity. Read the [press release](#).

### Toxicity Unknown ... Lack of hazard data hampers response to chemical spill in West Virginia

[Source: Chemical & Engineering News, January 17, 2014](#)

Author: Jeff Johnson and Cheryl Hogue

A lack of toxicity data stymied officials in Charleston, W.Va., this week as they rushed to clean up the city's contaminated drinking water system.

They ordered more than 300,000 people not to drink or wash in tap water for nearly a week after a leaking chemical storage tank poured thousands of gallons of a coal-processing liquid into the Elk River. They advised pregnant women to drink bottled water until the chemical is no longer detectable in the water system....

Polluting the water system was crude 4-methylcyclohexanemethanol (MCHM), which is used to clean coal for electricity-generating plants. Little is known about the hazards of the substance, a situation that left officials scrambling for answers as they faced a frightened and angry public.

"That was a new chemical for us. We never encountered it in any of our previous investigations," says Daniel M. Horowitz, managing director of the Chemical Safety & Hazard Investigation Board....

The lack of toxicity data on MCHM, Horowitz says, demonstrates "a very profound point: There are literally tens of thousands of chemicals that are out there for which we don't have complete hazard information."

[Read more...](#)

Also see the news story from Reuters, "[U.S. senators propose bill to prevent chemical spills after West Virginia leak.](#)"

Read a *New York Times* opinion article written by Rafael Moure-Eraso, the chair of the U.S. Chemical Safety Board, titled "[The Next Accident Awaits.](#)"

### First Application for Authorisation successfully through ECHA committee stage

[Source: H2 Compliance, January 20, 2014](#)

Author: Ursula Hayes

The first Authorisation Application submitted under the REACH program for the use of a substance of very high concern (SVHC), took a big step forward when ECHA's scientific committees for Risk Assessment (RAC) and Socio-economic Analysis (SEAC) adopted acceptable opinions on this application. Rolls-Royce is the first company to go through the review process by both ECHA's committees, after submitting an authorisation for the continued use of the plasticizer DEHP (Bis(2-ethylhexyl)phthalate) within the manufacture of aero engines.

Background: Authorisation will be granted if the applicant can demonstrate that the risk from the use of the substance on REACH's Annex XIV (Authorisation list) is adequately controlled. If not, then an authorisation can still be granted when the socio-economic benefit of using the substance outweighs the risks and there are no suitable alternative substances or technologies. Key parts of the application include a chemical safety report, an analysis of the possible alternatives, a substitution plan (if suitable alternatives are available) and as needed a socio-economic analysis. The Risk Assessment committee (RAC) is tasked with evaluating the risks to human health and the environment of the substance use plus the adequacy of the risk management measures and any possible alternatives. The Socio-economic Analysis committee is tasked with assessing the socio-economic factors and the feasibility of the alternatives to the use of the substance.

So why is the RAC and SEAC opinion a noteworthy event? With the Rolls-Royce's application for authorisation being the first submission to ECHA, it became the unofficial authorisation beacon in yet uncharted territory: REACH authorisation approval. This authorisation application has been and will continue to be closely monitored by all interested parties and if successful, it may be heralded as the unofficial "model" for subsequent applications.

[Read more...](#)

Also see ECHA's "[SVHC Roadmap Implementation Plan.](#)"

### Green-Building Labels Trigger A Race To The Top

[Source: Chemical & Engineering News, January 24, 2014](#)

Author: Janet Pelley

Rib eye steaks, washing machines, and even buildings can don labels signaling their environmental sustainability. As the number of organizations that hand out these environmental certifications, or ecolabels, grows, some researchers wonder if the tags are merely window dressing or if they actually push producers to improve the sustainability of their goods. For the first time, a new study shows that an ecolabel for green buildings provides a marketing bonus that pushes firms to construct buildings that are more sustainable than they would have otherwise (*Environ. Sci. Technol.* 2014, DOI: 10.1021/es4042447).

Groups that award ecolabels aim to inform consumers of the sustainability of products, create a competitive advantage for the greenest items, and eventually push less environmentally friendly products out of the market. "The big question for ecolabels is whether they change behavior, or are they simply rewarding behavior that would have happened anyway," says Paul F. Steinberg, a political scientist at Harvey Mudd College, who was not involved in the study.

[Read more...](#)

Read the original study, "[Performance or Marketing Benefits? The Case of LEED Certification.](#)"

### Detecting Chemicals, Measuring Strain with a Pencil and Paper

[Source: Northwestern University, January 22, 2014](#)

Sometimes solving a problem doesn't require a high-tech solution. Sometimes, you have to look no farther than your desktop.

Three students from Northwestern University's McCormick School of Engineering -- an undergraduate, a master's student, and their teaching assistant -- have proven that pencils and regular office paper can be used to create functional devices that can measure strain and detect hazardous chemical vapors.

A paper describing their findings, "Pencil Drawn Strain Gauges and Chemiresistors on Paper," was published January 22 in *Scientific Reports*, an open-access journal from the Nature Publishing Group.

The project originated in fall 2011 in McCormick's Introduction to Conducting Polymers course (MSE 337) during a discussion about the conductive properties of graphene, a one-atom thick layer of carbon that can be parsed from regular pencil lead. (A misnomer, pencil "lead" actually comprises graphite in a clay binder.)

[Read more...](#)

Read the [original paper](#) in *Scientific Reports*.

### Potential risk factor for Alzheimer's: DDT exposure

[Source: Emory University, January 27, 2014](#)

Patients with Alzheimer's disease have significantly higher levels of DDE, the long-lasting metabolite of the pesticide DDT, in their blood than healthy people, a team of researchers has found.

In a case-control study involving 86 Alzheimer's patients and 79 healthy elderly controls, researchers found that DDE levels were almost four times higher in serum samples from Alzheimer's patients than in controls. Having DDE levels in the highest third of the range in the study increased someone's risk of Alzheimer's by a factor of four.

The results were published Monday, Jan. 27 in *JAMA Neurology*.

"This is one of the first studies identifying a strong environmental risk factor for Alzheimer's disease," says co-author Allan Levey, MD, PhD, director of Emory's Alzheimer's Disease Research Center and chair of neurology at Emory University School of Medicine. "The magnitude of the effect is strikingly large -- it is comparable in size to the most common genetic risk factor for late-onset Alzheimer's."

[Read more...](#)

See the original study in *JAMA Neurology*, "[Elevated Serum Pesticide Levels and Risk for Alzheimer Disease](#)."

### Global Effort on PBT Chemicals Called Useful; Funding Seen as Challenge

[Source: Chemical Regulation Reporter, January 27, 2014](#)

Author: Pat Rizzuto

Jan. 21 -- Governments could reduce redundant work and encourage more consistent classifications of persistent, bioaccumulative and toxic (PBTs) chemicals by sharing data and approaches they use to determine how and when to classify a chemical as a PBT, governmental and academic science policy analysts said Jan. 17.

Yet, shrinking budgets combined with the growing number of chemical laws, regulations and related issues that countries and regions already are tackling on their own and through international treaties and other forums make it a challenge to find and fund government scientists' participation, they said.

The science policy specialists discussed PBT chemicals in light of a report, "Scientific and Policy Analysis of Persistent, Bioaccumulative and Toxic Chemicals: A Comparison of Practices in Asia, Europe and North America," released by Indiana University in December.

[Read more...](#)

Read the [report](#) (pdf).

See also, from *Environmental Health News*, "[Banned Scotchgard chemical still contaminating San Francisco seals.](#)"

### Caramel color: The health risk that may be in your soda

[Source: ConsumerReports.org, January 20, 2014](#)

Caramel color, added to many soft drinks and some foods to turn them brown, may sound harmless, even appetizing. But in no way does it resemble real caramel. Some types of this artificial coloring contain a potentially carcinogenic chemical called 4-methylimidazole (4-Mel). Under California's Proposition 65 law, any food or beverage sold in the state that exposes consumers to more than 29 micrograms of 4-Mel per day is supposed to carry a health-warning label. In recent Consumer Reports' tests, each of the 12-ounce samples of Pepsi One and Malta Goya had more than 29 micrograms per can or bottle. While [Consumer Reports] cannot say that this violates California's Prop 65, [they] believe that these levels are too high, and [they] have asked the California Attorney General to investigate.

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