

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.



EPA's trichloroethylene (TCE) risk assessment: Will it succeed in protecting workers?

[Source: The Pump Handle, July 14, 2014](#)

Author: Elizabeth Grossman

What do these places have in common: Camp Lejeune in North Carolina; Mountain View, California, where Google headquarters are located; Endicott, NY - the birthplace of IBM; and 389 Superfund sites in at least 48 states plus Puerto Rico and the Virgin Islands? All are contaminated by trichloroethylene (TCE), a volatile organic compound classified as a carcinogen that's been widely used as a solvent and degreaser in large-scale industrial processes, small commercial shops and in some products used by individual consumers. On June 25th, the Environmental Protection Agency (EPA) released its final risk assessment for TCE, the first such report to be completed for any of the 83 "work plan" chemicals EPA identified in 2012 as sufficiently hazardous to warrant priority assessment. It is the first chemical risk assessment EPA has completed under the Toxic Substances Control Act (TSCA) -- the federal law that regulates chemicals in commerce -- since it evaluated asbestos in 1986.

[Read more...](#)

See from U.S. EPA, "[EPA Releases Final Risk Assessment on Trichloroethylene \(TCE\) / Agency begins process to address potential human health risks](#)" and the June 2014 TSCA Work Plan Chemical Risk Assessment, "[Trichloroethylene: Degreasing, Spot Cleaning and Arts & Crafts Uses](#)".

TURI's Note: Dr. Jason Marshall, Director of the TURI Cleaning Laboratory, will be speaking at an EPA Workshop: Alternatives and Risk Reduction for Trichloroethylene (TCE), July 29, 2014. See conference [agenda](#).

Triclosan and the Great Lakes

[Source: Canadian Environmental Law Association, July 9, 2014](#)

Author: Anne Wordsworth

It's today or any day. You've washed your hands and face with soap. Glancing at the bottle, you notice it says "antibacterial," "fights odours" or "kills germs." You turn off the tap and watch the sudsy water slurp down the drain not giving it a second thought. A few hours later, having cleared the sewage treatment plant, a flush of triclosan-tainted soap washes into our rivers and lakes where experts tell us it is immediately toxic to fish and other aquatic creatures.

Antibacterial or antimicrobial generally means that the product contains triclosan or its close relative, triclocarban. These buzzwords are meant to comfort us with the idea that we have washed all nasty bacteria off our skin or our teeth.

But is there any evidence to back this up? As it turns out, very little. The U.S. Centers for Disease Control has found that plain old soap and water are just as effective at keeping us safe and healthy. Despite the lack of evidence, however, this pesticide (because that's what it is!) has found its way not only into thousands of cosmetics but as an additive in toys, toothbrushes, cutting boards, mattresses, yoga mats, carpets and garbage cans -- everywhere that bacteria, good or bad, may be lurking.

[Read more...](#)

See Canadian Environmental Law Association report, "[Chemicals In Consumer Products are Draining Trouble into the Great Lakes Ecosystem](#)".

Also see press release from Clean Production Action, "[Chemicals in Consumer Products - Draining trouble into the Great Lakes](#)".

Green Eggs and HIM

[Source: Harvard Medical School, July 9, 2014](#)

Author: Stephanie Dutchen

Monica Colaiácovo has made a career of studying meiosis, the type of cell division that produces eggs and sperm.

Meiosis is essential for healthy reproduction. Chromosomal abnormalities resulting from errors in meiosis cause Down syndrome, more than 35 percent of miscarriages and 4 percent of stillbirths, and other conditions.

In her search to "understand everything that matters to make sure you end up with the right number of chromosomes in the eggs and sperm," Colaiácovo, associate professor of genetics at Harvard Medical School, has discovered that meiosis can be disrupted not only by genetic mutations but also by exposure to toxic chemicals present in the environment.

Worse, she's finding evidence that those disruptions may be passed down not only to an exposed organism's children, but also to its grandchildren and great-grandchildren.

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Feds to conduct more studies of MCHM

[Source: The Charleston Gazette, July 23, 2014](#)

Author: Ken Ward Jr.

Federal scientists will conduct new studies to examine the potential health effects of exposure to the chemicals released during the January leak at the Freedom Industries tank farm along the Elk River in Charleston, under an agreement announced Wednesday.

The National Toxicology Program at the U.S. Department of Health and Human Services will conduct the studies, using computer modeling and tests on laboratory animals to learn more about the impact of the leaked chemicals on human health, according to announcements from Sen. Joe Manchin, D-W.Va., the Tomblin administration and the Kanawha-Charleston Health Department.

John Bucher, associate director of the program, said officials are hopeful the new studies will confirm initial federal findings -- reported by the Centers for Disease Control and Prevention in March -- that long-term adverse health effects from the leak are unlikely.

[Read more...](#)

See article in *Scientific American*, "[Cause Found for Large Chemical Spill in West Virginia](#)".

Also see Hazardous Substances Data Bank (HSDB) information on [4-Methylcyclohexanemethanol, CAS No. 34885-03-5](#).

Evaluation of Green Jacket Materials in Communications Cables

[Source: *Wire & Cable Technology International*, May, 2014](#)

Author: Justin Quinn

In February 2009, the Consumer Product Safety Improvement Act made it unlawful in the USA to make or sell any children's toys or child care articles that contain concentrations of more than 0.1% of various phthalate esters (phthalates). Later that year, the U.S. Environmental Protection Agency (EPA) first issued its Phthalates Action Plan.

The plan specifically lists eight phthalates and states in part that, "EPA is concerned about phthalates because of their toxicity and the evidence of pervasive human and environmental exposure to them. Thus, EPA intends to initiate action to address the manufacturing, processing and distribution in commerce and/or use of these eight phthalates."

Some phthalates are already restricted from children's toys in the European Union (EU), and many are now included in the European Chemicals Agency's Substances of Very High Concern (SVHC) list. These restrictions, coupled with activists' reporting, have forced some producers to use alternate materials and created a scare among consumers in various markets. ...

Alternative plasticizers do exist. Recently, chemical companies have begun producing phthalate-free PVC compounds made with bio-based plasticizers. These "green" materials are being used to produce such things as outdoor furniture, window shades and foot wear. Now, some suppliers are marketing PVC compounds made with bio-based plasticizers for use in communication cables.

This article will evaluate the performance of fiber optic communication cables made with a phthalate-free PVC compound containing a bio-based plasticizer.

[Read more...](#)

EPA Warning: Recharging Air Conditioners with Wrong Refrigerant Poses Injury and Fire Risks

[Source: U.S. Environmental Protection Agency, July 21, 2014](#)

WASHINGTON -- The U.S. Environmental Protection Agency (EPA) is cautioning homeowners, manufacturers of propane-based refrigerants, home improvement contractors and air conditioning technicians of the safety hazards related to the use of propane in existing motor vehicle and home air conditioning systems.

A number of refrigerants with "22a" or "R-22a" in the name contain highly flammable hydrocarbons, such as propane. These refrigerants are being marketed to consumers seeking to recharge existing home and motor vehicle air conditioning systems that were not designed to use propane or other flammable refrigerants. These refrigerants have never been submitted to EPA for review of their health and environmental impacts and are not approved for use in existing air conditioning systems.

[Read more...](#)

See from U.S. EPA, "[Questions and Answers about R-22a](#)".

Also see article in *SFGate*, "[FBI issues warning about air conditioner coolant](#)".

Death on the Job Report

[Source: AFL-CIO, May, 2014](#)

Workplaces are much safer today than when the Occupational Safety and Health (OSH) Act was passed in 1970, which promised workers in this country the right to a safe job. The job fatality rate has been cut by 81 percent; more than 492,000 workers lives have been saved. But too many workers remain at serious risk of injury, illness or death as workplace tragedies continue to remind us. These tragedies are all preventable.

The 2013 explosion at a West, Texas fertilizer plant killed 15 people, most of them volunteer emergency responders, and was caused by an unregulated chemical industry. The 2010 explosion at Massey Energy Upper Big Branch in West Virginia killed 29 miners. The 2010 BP Transocean Gulf coast rig explosion killed 11 workers and caused a major environmental disaster.

[Read more...](#)

Access report [here](#).

See from *Hazards Magazine*, "[Chemicals, dust and deaths and the new rush for oil and gas](#)".

Also view from *Laboratory Equipment*, "[Fracking Industry Seeks Better Chemicals](#)".

7 Nontoxic Nail Polish Brands

Source: [EcoWatch, February 19, 2014](#)

Author: Jessica Zischke

Most of those cute little bottles lined up in your bathroom have a secret: they're filled to the brim with chemicals. Some nail polish brands have nearly 30 chemicals all combined. These harsh chemicals can not only be bad for the environment, but also bad for you, as they cause nails to become brittle and have harsh fumes. No nail polish is completely natural, but the most important thing to look for are brands that are "3-free," meaning they don't use toluene, dibutyl phthalate (DBP) or formaldehyde, which are all known carcinogens. Some brands also describe themselves as "5-free" when they don't use formaldehyde resin or camphor in addition.

Many of these brands still use other chemicals, so be sure to double-check the ingredients for others that cause you concern. Whether you already have the best of the best when it comes to natural cosmetics or you're just starting to green up your shelves, we've rounded up some of the best brands that have dedicated themselves to more natural nail care, so your next manicure can be headache- and toxin-free.

[Read more...](#)

Detailed ingredient information for many products is available in the Environmental Working Group's [Skin Deep Cosmetics Database](#) which is currently celebrating its 10th anniversary. See "[The Story of Skin Deep](#)".

Specific information on nail care and nail polish can be found [here](#).

TURI's Note: See our web page on [Nail and Hair Salons](#).

Phthalates Are Out of Children's Toys, But In Your Food

Source: [Environmental Working Group, July 16, 2014](#)

Author: Simone Pitre

Just when you thought that phthalates, chemicals added to plastics to make them more flexible, were off your radar, think again.

Back in 2008, after these chemicals were shown to disrupt the endocrine system, the U.S. Consumer Product Safety Commission restricted six phthalates in children's toys and childcare products. Canadian authorities issued similar regulations the following year.

But a recent study funded by the National Institute for Environmental Health Sciences has found that people are still being exposed to these toxic chemicals via food processing and packaging. They can show up in cream-based dairy products, poultry, cooking oils and other common foods.

[Read more...](#)

Also read "[Big Dairy Is Putting Microscopic Pieces of Metal in Your Food](#)" and "[Slipping Through The Cracks: An Issue Brief on Nanomaterials in Food](#)".

Is Your Electroplating Waste Hazardous?

Source: [Products Finishing, July 1, 2014](#)


Author: Luis Marini

Processing of hazardous waste that contains precious metals is a challenge and responsibility that many electroplating companies face. Cyanide- and acid-based solutions, and materials such as plating bath filters and resins, all have the potential to cause injury and harm to our environment if not disposed of properly.

Many companies may not realize that they are liable for how their precious-metal-bearing waste is handled and, ultimately, for the repercussions if a spill or similar incident were to occur. Because of the inherent risks associated with the processing of hazardous waste, a comprehensive processing plan is essential to protect the environment and individuals handling the materials, and to avoid potential fines or lawsuits.

In accordance with the Resource Conservation and Recovery Act (RCRA), the U.S. Environmental Protection Agency has established a set of regulations for handling hazardous waste from the time it is generated through disposal. These regulations can help companies determine if their precious-metal-bearing wastes are hazardous, and how to properly handle, transport and dispose of these materials.

[Read more...](#)



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