Greenlist Bulletin

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

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In This Issue

As OSHA Emphasizes Safety, Long-Term Health Risks Fester

UNEP Global Chemicals Outlook (GCO) Full Report Available

Efficiency Performance Contracting for Smaller Manufacturers: Progress in the Metalworking Industry

Ecolab Launches Toxic-Chemical Free Industrial Laundry Detergent

Lead-Based Paint Still Being Sold in Developing Nations

EPA Updates Mercury and Air Toxics Standards for New Power Plants/ Agency also proposes updates to oil and gas storage tank standards

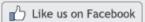
Taking Green Chemistry Out Of The Lab and into Products

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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.

As OSHA Emphasizes Safety, Long-Term Health Risks Fester

Source: The New York Times, March 30, 2013

Author: Ian Urbina

TAYLORSVILLE, N.C. -- Sheri Farley walks with a limp. The only job she could hold would be one where she does not have to stand or sit longer than 20 minutes, otherwise pain screams down her spine and up her legs.

"Damaged goods," Ms. Farley describes herself, recalling how she recently overheard a child whispering to her mother about whether the "crippled lady" was a meth addict.

For about five years, Ms. Farley, 45, stood alongside about a dozen other workers, spray gun in hand, gluing together foam cushions for chairs and couches sold under brand names like Broyhill, Ralph Lauren and Thomasville. Fumes from the glue formed a yellowish fog inside the plant, and Ms. Farley's doctors say that breathing them in eventually ate away at her nerve endings, resulting in what she and her co-workers call "dead foot."

A chemical she handled -- known as n-propyl bromide, or nPB -- is also used by tens of thousands of workers in auto body shops, dry cleaners and high-tech electronics manufacturing plants across the nation. Medical researchers, government officials and even chemical companies that once manufactured nPB have warned for over a decade that it causes neurological damage and infertility when inhaled at low levels over long periods, but its use has grown 15-fold in the past six years.

Read more...

Also read an article in the March 2013 *NIEHS Environmental Factor* <u>highlighting the peer review of 1-Bromopropane</u> for listing in the new Report on Carcinogens.

TURI's Note: nPB was added to the TURA Toxic or Hazardous Substances list reportable as of 2010. View the 4-page nPB fact sheet here.

UNEP Global Chemicals Outlook (GCO) Full Report Now Available

Source: United Nations Environment Programme, February 2013

UNEP, in close collaboration with OECD, WHO and other organisations of the Inter-Organization Programme for the Sound Management of Chemicals (IOMC), is developing a Global Chemicals Outlook to frame current understanding of trends in chemicals production, use and disposal, economic implications of these trends, and policy options.

Current trends show that patterns of global chemicals production, trade, use and disposal are changing towards developing countries and economies in transition. Understanding these changes in the chemicals production, trade, use and disposal -- and the potential risks these pose -- is essential to ensuring that chemicals are managed so that their contribution to improving quality of life is maximized and their related risks minimized.

Read more...

Access full report here.

TURI's Note: Rachel Massey and colleagues at UMass Lowell served as coauthors.

Efficiency Performance Contracting for Smaller Manufacturers: Progress in the Metalworking Industry

Source: Illinois Sustainable Technology Center, March 2013

Author: Thomas J. Bierma

Efficiency performance contracts (EPCs) for small and medium enterprises (SMEs) are a market-based approach that rewards suppliers for improving efficiency and reducing waste in SME operations through pollution prevention and energy efficiency innovations. However, prior research has shown that purchases typically covered by EPCs -- such as metalworking fluids, chemicals, paint, electricity, or natural gas -- are usually too small in SMEs to support traditional EPC programs.

This report addresses the possibility of combining two or more of these purchases under one EPC, or linking them to a larger purchase, such as tooling. This project assisted and monitored the progress of six Illinois SMEs in the metalworking industry as they explored the adoption of EPCs and the expansion of these EPCs to include multiple purchase areas.

Results indicate that an EPC based on tooling is clearly practical and beneficial for many SMEs. SME managers expressed interest in expanding tooling management EPCs to include metalworking fluids, and developing EPCs based on energy or paint purchases. However, no EPC other than tooling management has yet been adopted by an SME participating in the project. Though the recent economic downturn is likely to focus greater management attention on cost-cutting strategies such as EPCs, adoption is likely to be slow without significant assistance to reduce uncertainty and risk.

Read more...

Ecolab Launches Toxic-Chemical Free Industrial Laundry Detergent

Source: Environmental Leader, April 2, 2013

Ecolab has introduced an industrial laundry program that it says cleans heavily soiled textiles without using hazardous chemicals and can save industrial laundry customers as much as 3 million gallons of water a year.

The Performance Industrial Program is a three-product system that uses Ecolab's patented Nonylphenol Ethoxylates (NPE)-free chemistry to remove petroleum, oil and grease.

Nonylphenol (NP) and NPEs, which are used in a wide variety of industrial applications and consumer products such as laundry detergents, are highly toxic to aquatic organisms, the EPA says. Once released into the water system, NPEs degrade to NP, which is bioaccumulative and can act as a hormone disruptor, according to the agency.

Read more...

Also check out EPA's Design for the Environment May 2012 <u>Alternatives Assessment for Nonylphenol Ethoxylates.</u>

Lead-Based Paint Still Being Sold in Developing Nations

Source: Environmental News Network, March 28, 2013

Author: Allison Winter

Lead is added to paint mainly to speed up drying and increase durability, but due to its toxic effects has been banned in many countries. Nonetheless, lead-based paint still poses a problem as older housing stock may contain lead-based painted walls. When this paint chips, inhalation and ingestion (particularly by children) can damage the nervous system and cause a slew of health problems. Despite the uproar of concern for this type of paint in western countries, new reports show that lead paint is still being sold in poor nations.

Perry Gottesfeld, lead author for an investigative study, has discovered high levels of the heavy metal in numerous house paints for sale throughout the African nation of Cameroon. Further investigation has led the research team to conclude that there's still plenty of lead paint for sale in other developing nations.

Two years ago Gottesfeld was in Cameroon, where he and collaborators at a local NGO now report they had found nearly a dozen enamel household paints with so much lead in them they exceeded the U.S. standard by 300 times or more. Only a few listed any ingredients on the label, and none had any warning language to alert consumers of the danger.

Read more...

Read original study in the *Journal of Occupational and Environmental Hygiene*, "Lead Concentrations and Labeling of New Paint in Cameroon."

EPA Updates Mercury and Air Toxics Standards for New Power Plants/Agency also proposes updates to oil and gas storage tank standards

Source: U.S. Environmental Protection Agency, March 29, 2013

WASHINGTON -- The U.S. Environmental Protection Agency (EPA) has issued updates to pollution limits for new power plants under the mercury and air toxics standards, based on new information and analysis that became available to the agency after the rule was finalized.

The updates are largely technical in nature and will have no impact on the sensible, achievable and cost-effective standards already set for existing power plants. The public health benefits and costs of the rule remain unchanged. EPA estimates that the standards, which will protect the health of millions of families, especially children, will prevent as many as 11,000 premature deaths and 4,700 heart attacks every year. The standards will also help America's children grow up healthier -- preventing 130,000 cases of childhood asthma symptoms and about 6,300 fewer cases of acute bronchitis among children each year.

The updated standards only apply to future power plants and do not change the types of pollution control technology that plants would install. The updates ensure that emissions limits are achievable and that pollution levels can be measured continuously.

Read more...

Taking Green Chemistry Out Of The Lab and into Products

Source: Yale Environment 360. May 16, 2012

Author: Roger Cohn

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Anastas, 49, recently left his high-ranking post at the EPA to return to the Yale School of Forestry & Environmental Studies, where he serves as a professor. In an interview with Yale Environment 360 editor Roger Cohn, he talked about his role in EPA's controversial decision to approve the use of chemical dispersants in the aftermath of the BP oil spill, why a chemical-by-chemical approach to

toxicity testing is not the best model for protecting the environment or human health, and why companies are increasingly applying the principles of green chemistry to the design of materials and products.

Read more...

For more information on oil dispersants used, read this article in *Chemical and Engineering News*, "Oil Dispersants Used During Gulf Spill Degrade Slowly In Cold Water."

Also read article in *Environmental Science and Technology*, "Biodegradability of Corexit 9500 and Dispersed South Louisiana Crude Oil at 5 and 25 °C."

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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