

Greenlist Bulletin

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

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In This Issue

FDA rejects petition to ban BPA in food packaging

Burning irony: flame retardants might create deadlier fires

Certain polybrominated diphenylethers: significant new use rule and test rule


Basel Convention: where are WEEe in Africa?

Use of common pesticide linked to bee colony collapse

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FDA rejects petition to ban BPA in food packaging

[Source: Milwaukee Journal Sentinel, March 30, 2012](#)

Author: Meg Kissinger

The Food and Drug Administration announced Friday that it was denying a petition to ban BPA from all food and drink containers, saying the science does not show an immediate cause for such action.

However, the federal agency cautioned that this ruling does not declare bisphenol A, or BPA, as safe. The agency says it is continuing its assessment of the chemical, which is used in the lining of most canned food and drinks.

Friday's action comes as a response to a petition filed in 2008 by the Natural Resources Defense Council claiming that the chemical poses a serious threat to human health.

"The FDA denied the NRDC petition today because it did not provide the scientific evidence needed to change current regulations, but this announcement is not a final safety determination and the FDA continues to support research examining the safety of BPA," said FDA spokesman Douglas Karas.

Karas said the FDA's recent research thus far indicates:

- Exposure to BPA of human infants is from 84% to 92% less than previously estimated.
- The level of BPA from food that could be passed from pregnant rodents to their unborn offspring is so low that it could not be measured. Researchers fed pregnant rodents 100 to 1,000 times more BPA than people are exposed to through food, and could not detect the active form of BPA in the fetus eight hours after the mother's exposure.
- People of all ages process and rid their bodies of BPA faster than the rodents used as test animals do.

The FDA continues to study the effects of BPA and will make any necessary changes to BPA's status based on the science, Karas said.

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Burning irony: flame retardants might create deadlier fires

[Source: Environmental Health News. April 4, 2012](#)

Author: Brett Israel

In one of the deadliest nightclub fires in American history, 100 people died at a rock concert in Rhode Island nearly a decade ago. But the biggest killer wasn't the flames; it was lethal gases released from burning sound-insulation foam and other plastics.

In a fatal bit of irony, attempts to snuff fires like this catastrophic one could be making some fires even more deadly.

New research suggests that chemicals - brominated and chlorinated flame retardants - that are added to upholstered furniture and other household items to stop the spread of flames increase emissions of two poisonous gases.

"We found that flame retardants have the undesirable effect of increasing the amounts of carbon monoxide and hydrogen cyanide released during combustion," study co-author Anna Stec, a fire specialist at the University of Central Lancashire in the United Kingdom, said in a statement.

These two gases are by far the biggest killer in fires. They are responsible for 60 to 80 percent of fire deaths, according to the National Fire Protection Assn. During the Rhode Island fire, the levels of hydrogen cyanide and carbon monoxide were high enough to kill in less than 90 seconds. (There is no evidence, however, that flame retardants were involved; the nightclub's foam insulation reportedly was not treated with them.)

Flame retardants made of brominated or chlorinated chemicals are added to furniture cushions, carpet padding, children's car seats, plastics that encase electronics and other consumer items. Under California standards adopted in the 1970s, foam inside furniture must withstand a 12-second exposure to a small, open flame, and much of the nation's furniture is manufactured with flame retardants to meet that standard.

However, while the chemicals may be slowing the spread of flames, when fires do occur, they may be more deadly. Few details of the new research from the United Kingdom are available since the findings have not yet been published. But the researchers said in one experiment, nylon containing the flame retardant brominated polystyrene released six times more hydrogen cyanide when set afire than the same material containing a halogen-free flame retardant.

Hydrogen cyanide is 35 times more deadly than carbon monoxide, and during a fire it can kill in as little as one minute, said Todd Shoebridge, a 30-year fire service veteran who is a captain at the Hickory Fire Department in North Carolina. "It's that serious," Shoebridge said.

Both carbon monoxide and hydrogen cyanide are products of incomplete combustion. As a room on fire loses oxygen, combustion becomes less efficient and gases and smoke rapidly increase. Inhaling the toxic air becomes unavoidable for people trapped in a fire.

Brominated and chlorinated flame retardants work by interfering with combustion, which can increase the amount of the gases.

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Certain polybrominated diphenylethers: significant new use rule and test rule

[Source: Federal Register. April 2, 2012](#)

The Agency is proposing to amend the Toxic Substances Control Act (TSCA) section 5(a) Significant New Use Rule (SNUR), for certain polybrominated diphenylethers (PBDEs) by:

Designating processing of six PBDEs, or any combination of these chemical substances resulting from a chemical reaction, as a significant new use; designating manufacturing, importing, and processing of a seventh PBDE, decabromodiphenyl ether (decaBDE) for any use which is not ongoing after December 31, 2013, as a significant new use; and making inapplicable the article exemption for SNURs for this action. A person who intends to import or process any of the seven PBDEs included in the proposed SNUR, as part of an article for a significant new use would be required to notify EPA at least 90 days in advance to ensure that the Agency has an opportunity to review and, if necessary, restrict or prohibit a new use before it begins. EPA is also proposing a test rule under TSCA that would require any person who manufactures or processes commercial pentabromodiphenyl ether (c-pentaBDE), commercial octabromodiphenyl ether (c-octaBDE), or commercial decaBDE (c-decaBDE), including in articles, for any use after December 31, 2013, to conduct testing on their effects on health and the environment. EPA is proposing to designate all discontinued uses of PBDEs as significant new uses. The test rule would be promulgated if EPA determines that there are persons who intend to manufacture, import, or process c-pentaBDE, c-octaBDE, or c-decaBDE, for any use, including in articles, after December 31, 2013.

[Download the Federal Register Notice](#)

Basel Convention: where are WEee in Africa? Findings from the Basel Convention E-waste Africa Programme

[Source: United Nations, February 2012](#)

West Africa faces a rising tide of e-waste generated by domestic consumption of new and used electrical and electronic equipment, according to a new United Nations report.

Domestic consumption makes up the majority (up to 85 percent) of waste electronic and electrical equipment (WEEE) produced in the region, according to the study, *Where are WEEE in Africa?* The e-waste problem in West Africa is further exacerbated by an ongoing stream of used equipment from industrialised countries, significant volumes of which prove unsuitable for re-use and contribute further to the amount of e-waste generated locally.

In the five countries studied in the UN report (Benin, Côte d'Ivoire, Ghana, Liberia, and Nigeria), between 650,000 and 1,000,000 tonnes of domestic e-waste are generated each year, which need to be managed to protect human health and the environment in the region.

Where are WEEE in Africa? sheds light on current recycling practices and on socio-economic characteristics of the e-waste sector in West Africa. It also provides the quantitative data on the use, import and disposal of electronic and electrical equipment in the region.

The report draws on the findings of national e-waste assessments carried out in the five countries from 2009 to 2011.

[Download the report](#)

Use of common pesticide linked to bee colony collapse

[Source: Harvard School of Public Health, April 5, 2012](#)

The likely culprit in sharp worldwide declines in honeybee colonies since 2006 is imidacloprid, one of the most widely used pesticides, according to a new study from Harvard School of Public Health (HSPH).

The authors, led by Alex Lu, associate professor of environmental exposure biology in the Department of Environmental Health, write that the new research provides "convincing evidence" of the link between imidacloprid and the phenomenon known as Colony Collapse Disorder (CCD), in which adult bees abandon their hives.

The study will appear in the June issue of the *Bulletin of Insectology*.

"The significance of bees to agriculture cannot be underestimated," says Lu. "And it apparently doesn't take much of the pesticide to affect the bees. Our experiment included pesticide amounts below what is normally present in the environment."

Pinpointing the cause of the problem is crucial because bees-beyond producing honey-are prime pollinators of roughly one-third of the crop species in the U.S., including fruits, vegetables, nuts, and livestock feed such as alfalfa and clover. Massive loss of honeybees could result in billions of dollars in agricultural losses, experts estimate.


Lu and his co-authors hypothesized that the uptick in CCD resulted from the presence of imidacloprid, a neonicotinoid introduced in the early 1990s. Bees can be exposed in two ways: through nectar from plants or through high-fructose corn syrup beekeepers use to feed their bees. (Since most U.S.-grown corn has been treated with imidacloprid, it's also found in corn syrup.)

In the summer of 2010, the researchers conducted an in situ study in Worcester County, Mass. aimed at replicating how imidacloprid may have caused the CCD outbreak. Over a 23-week period, they monitored bees in four different bee yards; each yard had four hives treated with different levels of imidacloprid and one control hive. After 12 weeks of imidacloprid dosing, all the bees were alive. But after 23 weeks, 15 out of 16 of the imidacloprid-treated hives-94%-had died. Those exposed to the highest levels of the pesticide died first.

The characteristics of the dead hives were consistent with CCD, said Lu; the hives were empty except for food stores, some pollen, and young bees, with few dead bees nearby. When other conditions cause hive collapse-such as disease or pests-many dead bees are typically found inside and outside the affected hives.

Strikingly, said Lu, it took only low levels of imidacloprid to cause hive collapse-less than what is typically used in crops or in areas where bees forage.

Scientists, policymakers, farmers, and beekeepers, alarmed at the sudden losses of between 30% and 90% of honeybee colonies since 2006, have posed numerous theories as to the cause of the collapse, such as pests, disease, pesticides, migratory beekeeping, or some combination of these factors.



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