Clearing the air by tracking toxics and chemicals

This year, the California Legislature passed chemical “right to know” legislation, requiring disclosures of ingredients in cosmetics and feminine hygiene products.
Previously, some ingredients could be listed as “fragrance” or could bypass disclosure requirements through trade secret protections.

Dr. Joanne Brasch, project manager of the nonprofit California Product Stewardship Council, a leading advocate of the legislation, said, “Maybe now we will know which ones (manufacturers) are adding lead, asbestos or chemicals linked to negative health impacts.”

The council has also brought attention to the use of polyfluoroalkyl substances, known as PFAS, in rugs and carpets.

Regulations on PFAS will take effect next spring, and even before the deadline American manufacturers are reportedly phasing out PFAS, using changes in fiber design, instead of the application of a chemical, to help carpets and rugs resist dirt, staining and premature aging.

Key to the process of identifying potentially problematic chemicals is the Green Ribbon Science Panel, which advises and acts as a resource to the California Department of Toxic Substances Control and the California Environmental Policy Council.

The next meeting, after nearly a year hiatus, will discuss 1,4-Dioxane in cleaning and personal care products. The chemical is a contaminant, created unintentionally during in the manufacture of surfactants, which are compounds affecting the solubility of products in water.

It is a suspected carcinogen, so the department will ask manufacturers to come up with ways to minimize it, said Karl Palmer, acting deputy director of the Safer Consumer Products branch of the Department of Toxic Substances Control.

Palmer credits 2008 “green chemistry” laws in California for initiating a public process to identify priority products for study and prodding those selling the products to conduct an analysis of alternatives. This process shifted the burden of investigation from government to private parties, academia and nonprofit organizations.

“The truth is, what we used to do was like playing a giant, highstakes game of chemical ‘whack a mole,’” Palmer said. “When something came up as potentially dangerous, we were reacting and studying that one, then you see laws and regulations to protect people, but there is a safety gap,” he said.
A 2006 study by scientists at UC Berkeley revealed the size of the gap; “of the 85,000 chemicals in commerce in the United States, most have not been studied by regulators for human and environmental effects,” Palmer said of the study’s conclusion.

The lack of knowledge led to a related problem. Sometimes, when one toxic substance was banned, another one, even worse, was used in its place. This was called “The problem of the regrettable substitute,” Palmer said.

For example, according to the Sept. 13, 2018, edition of Science magazine, a publication of the nonprofit American Association for the Advancement of Science, manufacturers of the soft plastic spouts in some drinking water bottles phased out bisphenol A (BPA), but switched to bisphenol S (BPS) and diphenyl sulfone.

Consequently, some products marketed as “BPA-free” contained substitutes that “may cause the same ill effects in mice, particularly in reproductive cells.”

With BPA in water bottles, toys, canned food linings and even cash register receipts, “a 2003-04 study by the U.S. Centers for Disease Control and Prevention found that 93% of Americans have at least trace levels of BPA in their blood.”

Although studies by the U.S. Food and Drug Administration have not concluded BPA is definitely dangerous to human health at normal exposure levels, use of BPA “remains controversial,” according to the article.

Some disclosures and safe alternative programs are self-administered by consumer product manufacturers. For example, when buying nail polish, look for the “5 free” label, signifying the product does not contain any of five hazardous chemicals found mostly in imported nail polishes.

Advocacy groups also investigate and certify products. For example, the Skin Deep database of the Environmental Working Group sets up a system for scoring products. Go to ewg.org/skindeep.

Sign up for the DTSC e-blasts to keep track of the latest chemical concerns and responses at dtsc.ca.gov/dtsc-e-lists.

Another tool is the EPA’s “safer choice” label program. The website has over 2,000 products for cleaning, car care and other uses with a label signifying ingredients “safer for human health and the environment.”

Visit epa.gov/saferchoice.

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