The New York Times
nytimes.com

December 22, 2007

Everyday Items, Complex Chemistry

By AMY SCHOENFELD

Holiday shoppers this season may still worry if the toys they buy contain lead after more than 10 million children's products were recalled this year for that reason.

But some scientists are urging consumers to focus on a different problem: the lack of hazard information on the thousands of chemicals in everyday products.

"We have enormous gaps in our understanding of how these chemicals affect health and the environment." said Michael P. Wilson, a public health scientist at the University of California, Berkeley. "And where we do have information, we see cause for concern."

The effects of human exposure to chemicals in consumer products are difficult to ascertain and are subject to dispute. As a result, there is a growing gap in the ways governments regulate chemicals. The European Union, Canada and California, for example, are restricting the use of some chemicals before the science on their hazards is absolutely clear; the federal government is not.

For retailers and manufacturers, conflicting requirements in the global marketplace pose a challenge. ompanies have two choices: make products with potentially harmful ingredients for some countries and not others or meet the strictest standards in all markets. Increasingly companies are choosing to conform to the most restrictive rules rather than wait for any scientific consensus.

Scientists are just beginning to see how long-term exposure to chemicals affects humans throughout a lifetime. Studies by the Centers for Disease Control and Prevention show that traces of hundreds of chemicals flow through the blood and urine of humans, but the center cautions that their presence does not mean that they cause harm.

Scientific research shows that thousands of chemicals in consumer products have toxic effects, but many of these studies are focused on higher levels of exposure. Less is known about the low but regular doses from everyday products in the home, like emissions from furniture glues and the absorption of cosmetics through the skin.

Industry scientists and many federal regulators say these exposures are harmless. They say that they are going to great lengths to make sure products are safe for intended uses.

"The bottom line is that there isn't widespread evidence that exposure to consumer products is causing public health problems," said Mike Walls, director of government affairs at the American Chemistry Council.

The United States has held on to its original 30-year-old chemical regulatory systems, which make it fficult for agencies to ban chemicals or require industry testing. While the government has worked with e industry on a voluntary basis to study as many 2,000 chemicals and phase out certain ones, it has required the study of only 200 chemicals and restricted the use of only 5 since 1976.

But that approach is being challenged by some experts who say that risks remain and that action may be

necessary even when the evidence is not clear-cut.

"There's this expectation that science can solve everything, but science can't ever meet these expectations," said Joel Tickner, director of the chemicals program at the Center for Sustainable Production at the University of Massachusetts, Lowell. "For some chemicals we may never be certain that they cause harm."

The European Union is following this precautionary approach. It recently adopted regulations that have allowed it to restrict hundreds of chemicals and require the industry to test most chemicals sold on the market.

Industry officials insist that the policies in Europe will exact a great economic cost. But many scientists, including some in government and the chemical industry, argue that Washington is taking the wrong path, allowing exposure to some products that are restricted in the European Union, Canada and even several American states.

Some retailers are working to avoid this double standard, choosing to adopt the restrictions of the European Union for products sold in the United States. And in some rare cases, companies are limiting certain chemicals even before Europe does.

Dell is one of the few. The company is planning to phase out brominated flame retardants in the plastics of its products by 2009, including one known as deca that is restricted only in Sweden, Maine and Washington.

"We don't regionalize," said David Lear, the company's director of environmental affairs. "We are doing this because this is where our customers want us to go."

ATTACHMENT 21

Fact-Based Article Analysis

Note: The Fact-Based and Issue-Based Article Analysis sheets must be copied back to back.

When you read the article, did it present a certain point of view about an issue under dispute? If so, use the other side of this sheet. If the article informed you but did not raise any concerns, use this side.

Key concept (written in a sentence).

Draw a figurative representation.

What are the facts? List at least five.

Write an article summary or definition in your own words. Do not list facts. Give an overview.

List your questions (at least two).

List at least five key words.

Relevance to today: This is important or not important because . . .

Fact-Based Article Analysis: Used by permission of Lynda Matchullis and Bette Mueller, Nellie McClung Collegiate, Pembina Valley S.D. No. 27.