

THE INK INDUSTRY COPEs WITH REGULATORY ISSUES

Food packaging, PCBs and more are on the agenda for the coming year.

BY DAVID SAVASTANO, EDITOR

Government regulations have changed the world of chemicals over the years, and not surprisingly, inks and their raw materials have been impacted. In particular, the food packaging industry has come under constant scrutiny.

Over the years, there have been attempts to regulate food packaging ingredients, but arguably the most successful has been the Swiss Ordinance and the accompanying Nestle Guidance.

Nestle had been involved in a serious incident in 2005, when 30 million liters of baby formula were recalled in Italy after traces of ITX from the packaging was found in the milk. That hurt the brand, and Nestle is sensitive to any chemicals in packaging.

Today, there is a lot more interest in the environment, and that reaches far past food packaging.

There are more stakeholders, including consumers and advocacy groups and NGOs (non-governmental organizations), involved in government processes, and this is leading to increased scrutiny of the materials that go into everyday products as well as into the environment.

George Fuchs, director, regulatory affairs and technology for the National Association of Printing Ink Manufacturers (NAPIM), notes that these concerns are global, and as a result, standards are being tightened.

“In the EU, the US as well as other areas, concern regarding chemical exposures from almost every sources/area is growing,” Fuchs said. There is increasing interest and awareness about possible adverse health impacts related to long term, very low level potential chemical exposures. The focus going forward for all chemical manufacturers will continue to shift to the use of the lowest hazard substances available and the minimization of any, potential customer exposures.”

PRINTING INKS AND PACKAGING

While ink is not, generally speaking, something that consumers ingest, food packaging remains a critical area where regulatory policy is continuing to evolve.

“Lately there has been increased interest from printers and brand owners to exclude chemicals of concern from food packaging,” said Lisa Fine, technical director for Ink Systems Inc. “PFOAs in general are of interest, because they are the latest chemicals to be placed on exclusion lists.”

David Wawer, executive director of the Color Pigments Manufacturers Association, Inc. (CPMA), said that CPMA has not identified increased interest from printers or brands about safety of inks or coatings used in food packaging. However, brand owners



are making their own individual requests to ink and pigment companies, and there are new government regulations on the way.

“Globally, there may be pressures in specific countries or regions, such as the proposed German Printing Ink Ordinance, to provide government agencies with new toxicological data studies to validate safety of inks or coatings,” Wawer added. “The European Commission is also working on revisions to existing EU rules for food contact materials, as a result of legislation enacted in 2018. We have not seen such movement yet with North American regulatory agencies.”

Rebecca Lipscomb, director, global regulatory affairs for INX International Ink Company, said that in general, brand owners appear to be taking a more holistic approach in risk assessments of their packaging.

“There are several brand owners continuing to develop specific policies that encompass regulations with a global perspective, which adds layers of complexity in regional packaging, as not all regulations align,” Lipscomb observed. “Inks and coatings are part of the packaging, and we actively participate with brand owners and printers to both help with the understanding of regulations and provide the safest outcomes possible with the package design.”

Evan Benbow, VP of research and development for Nazdar, noted that adding new chemicals to regulations is one area of concern for ink manufacturers.

“Proposed classification of TMPTA as a carcinogen is by far the most concerning due to its broad use in the industry,” said Benbow. “The current and ongoing reclassifications of photoinitiators such as TPO is a major concern as our toolbox of materials is shrinking.”

PCB CONCENTRATIONS

Polychlorinated biphenyls (PCB) are another chemical of interest to regulators. Wawer noted that the CPMA has learned from its EU industry colleagues at ETAD that new regulatory initiatives from the European Chemicals Agency (ECHA) on the topic of PCBs could directly impact one or two color pigments, depending upon how EU regulators adopt a final definition for PCBs.

“There has been turmoil and inconsistency in the past two years with ECHA definitions and applications of PCBs within the various annexes, which EU organizations ETAD and Eurocolour are working to resolve,” added Wawer.

In North America, and particularly the US, the manufacture and intentional use of PCBs in new products was banned in 1980. However, Wawer pointed out that this regulation did not remove from commerce any products or materials that had previously been intentionally manufactured with PCBs. Meanwhile, the state of Washington is creating its own regulations on the matter.

“The state of Washington adopted a PCBs Chemical Action Plan in 2014, which CPMA commented on extensively,” Wawer observed. “Washington’s state legislature enacted a Safer Products law in mid-2019 that included PCBs as one of the five chemical substances of concern. The state’s regulatory agency, the Department of Ecology, has been conducting public workshops

in 2020 and 2021, and just recently published a draft regulatory report for review by the Washington State legislature in June 2022. That report cites printing inks and paints and coatings as potential sources of consumer exposure to PCBs, even though PCBs are not used as raw materials in the manufacture of printing inks or coatings.”

Wawer added that at the national level, the National Toxicological Program (NTP), a division of the National Institutes for Health (NIH), is in the process of conducting research on PCB-11, a project that began in the 2019 timeframe.

“The primary objective of this study is to fill PCB 11 data gaps,” said Wawer. “A draft report is anticipated in 2022.”

“Health concerns over polychlorinated biphenyls have been around for many years,” Fuchs reported. “Currently, the Washington State Department of Ecology (DoE) is implementing a program to reduce/eliminate sources of PCB. One of the potential source categories identified by Washington State is coatings (including printing inks). This issue is currently under study by DoE for potential, future regulation. NAPIM is working with the Washington State Department of Ecology to assist them in understanding how printing inks are produced and used.” ■

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