

August 7, 2020 Denka Company Limited

U.S. EPA review of chloroprene model reaches next step

The U.S. Environmental Protection Agency has published in the Federal Register notice of its intent to solicit peer review of an advanced physiologically-based pharmacokinetic (PBPK) model studying the health impacts of chloroprene.

If accepted, EPA could use this model to make fundamental changes to the 2010. Integrated Risk Information System Inhalation Unit Risk (IUR), which the agencyused in 2015 in the National Air Toxics Assessment to suggest historical levels of emissions from the Pontchartrain Works Plant currently operated by Denka Performance Elastomer created health risks for nearby residents.

The PBPK model uses a more advanced and accurate method of determining risk in humans than EPA's 2010 review did and has been published in the leading peer-reviewed scientific journal Inhalation Toxicology. It concludes the IUR EPA developed in 2010 could be as much as 130 times too conservative. The 2010 IUR was used at one point to inaccurately suggest a permissible lifetime average exposure level of 0.2 micrograms per cubic meter.

DPE submitted the model to EPA in 2019. After accepting the model, EPA reviewed it internally. Now, the agency is taking the first step of the external review of the model by soliciting public comments to further verify its accuracy before suggesting updates to the 2010 IUR. (https://cfpub.epa.gov/ncea/iris_drafts/recordisplay.cfm?deid=349015)

This step comes after nearly five years of work to correct the 2010 review — which was contradicted by numerous scientific studies and local health data compiled by the state government.

The PBPK model's findings are corroborated by existing historical research, including decades-long health studies of chloroprene facility workers, including more than 1,200 employees of the LaPlace plant, as well as health statistics compiled and published by the Louisiana Tumor Registry, which all suggest DPE does not create any increased risks to the people who work in or live near the 50- year-old plant.

According to a letter from the Director of EPA's Office of Air and Radiation, Peter Tsirigotis, dated September 2019, the EPA has not used the 2010 IRIS IUR to create any standards or limits for chloroprene concentrations in ambient air. Tsirigotis stated that IUR could not be used to establish acceptable concentration standards without also considering, among other things, costs, energy, safety and control technologies.

In addition to working to correct the science, DPE voluntarily invested more than \$35 million in air emissions reduction technologies, which have reduced the amount of chloroprene the facility emits by 85 percent. The company continues to work with state and federal regulatory agencies both to develop the best science regarding the chemical, and to identify opportunities to further reduce the facility's footprint.

About Denka

Denka is a chemical manufacturer headquartered in Chuo-ku, Tokyo. The company specializes in developing business activities on a global scale across a wide range of fields, from inorganic and organic chemicals, to electronic materials and pharmaceuticals. Founded in 1915, Denka has steadily continued to develop and manufacture products that contribute to the development of society by fully utilizing its unique concepts and technological capabilities. Upholding its corporate slogan, "Possibility of chemistry," the company and its president, Manabu Yamamoto, are committed to contributing to the sound development of society while sincerely tackling the challenges that society is now confronting

About Denka Performance Elastomer

Denka Performance Elastomer LLC acquired DuPont's Neoprene manufacturing operations at the Pontchartrain Works site in LaPlace in November 2015. DPE employs around 240 manufacturing jobs associated with the Pontchartrain Works production site. DPE intends to make strategic investments in the Pontchartrain Works facility while adhering to a key DPE guideline to develop and supply products that are safe and environmentally friendly. DPE considers the safe production and handling of materials and products and the prevention of their unauthorized release into the environment as its most important mission as a chemical manufacturer.

Reference:

 "Review of Chloroprene Monomer Toxicity Assessment Performed by the U.S. Environmental Protection Agency". February 14, 2020

https://www.denka.co.jp/eng/storage/news/pdf/266/20200214 denka statement en.pdf

 "Statement regarding NATA's Toxicity Assessments on the Areas Surrounding Denka's U.S. Subsidiary and Initiatives Being Undertaken to Reduce Environmental Burden" June 19, 2019 <u>https://www.denka.co.jp/eng/storage/news/pdf/238/20190619_statement_en.pdf</u>

[For Inquiries about This Press Release from Media] Corporate Communications Dept. Tel : +81-3-5290-5511