Styrene Information and Research Center Statement on National Toxicology Program Board of Scientific Counselors Meeting, Feb. 24, 2009

The Styrene Information and Research Center (SIRC) appreciated the opportunity to sponsor speakers who explained to the National Toxicology Program’s (NTP’s) Board of Scientific Counselors (BSC) on Feb. 24, 2009, why the scientific evidence does not support styrene being listed as “reasonably anticipated to be a human carcinogen” in the NTP’s Report on Carcinogens (RoC).

The NTP, which is located administratively within the National Institute of Environmental Health Sciences (NIEHS), Research Triangle Park, N.C., currently is evaluating styrene for possible inclusion in its 12th RoC. The BSC held a public meeting in Research Triangle Park on February 24 to peer-review the draft profile on styrene that NTP staff put forward as the basis for its “reasonably anticipated” listing recommendation.

Scientists who testified on behalf of SIRC at the meeting were: Philip Cole, M.D., Dr.P.H., School of Public Health, University of Alabama, Birmingham, and George Cruzan, Ph.D., DBAT, who is SIRC’s science advisor. Cole discussed a new report concerning styrene’s potential human carcinogenicity that SIRC commissioned and of which he is a co-author. The authors submitted their paper, “Epidemiologic studies of styrene and cancer: A review of the literature,” Dec. 15, 2008, to the NTP in response to the proposed RoC styrene listing, and Cole said it has been offered for publication in a peer-reviewed scientific journal. SIRC had no prior knowledge of the findings, which report:

- “[N]o consistent increased risk of any form of cancer among workers exposed to styrene.”
- That “[t]he available epidemiologic evidence does not support a causal relationship between styrene exposure and any type of human cancer. Further updates of the most informative studies, however, are warranted.”

1 Paolo Boffetta, M.D., M.P.H., International Agency for Research on Cancer, Lyon, France, and Vanderbilt University, Nashville, Tenn.; Philip Cole, M.D., Dr.P.H., School of Public Health, University of Alabama, Birmingham, Ala.; Hans-Olav Adami, M.D., Ph.D., and Dimitrios Trichopolous, M.D., M.S., Ph.D., Department of Epidemiology, Harvard School of Public Health, Boston, Mass., and Jack Mandel, Ph.D., M.P.H., Dalla Lana School of Public Health, University of Toronto, Ontario, Canada.
• That “[t]he evidence of human carcinogenicity of styrene is inconsistent and weak. Based on the available evidence, one cannot conclude that there is a causal association between styrene and any form of cancer. There are, however, steps that could be undertaken to better exploit the available epidemiologic data.”

Dr. Cruzan, who was the final speaker on styrene, addressed important questions that had been raised during the meeting and presented pertinent data that there was insufficient time to discuss during previous presentations, during which each speaker was given seven minutes.

SIRC also supported the appearances of several other scientists who testified at the BSC meeting on behalf of the styrene industry; they were:

• Dr. Jeff Charles, toxicology consultant, who represented the Emulsion Polymers Council.
• Dr. Julie Goodman, Gradient Corp., Cambridge, Mass., who represented the American Composites Manufacturers Association.
• Dr. Earle Nestmann of CANTOX, Mississauga, Ontario, who represented the American Chemistry Council.
• Dr. Lorenz Rhomberg, Gradient Corp., Cambridge, Mass., who represented the National Marine Manufacturers Association.

The RoC is a congressionally mandated listing of “known” and “reasonably anticipated to be” human carcinogens; the Secretary of Health and Human Services delegates its preparation to the NTP. RoC listings carry no automatic regulatory implications, but frequently are cited in regulatory decision-making. Styrene was among a number of chemicals nominated in 2004 for possible inclusion in the 12th RoC. Information on the status of the NTP styrene evaluation may be accessed from http://ntp.niehs.nih.gov/go/9732.

Located in Arlington, Va., SIRC develops medical, scientific and technical information to inform industry, government and the public on health and environmental topics associated with styrene. SIRC’s correspondence to and from the NTP concerning its styrene review is available upon request from SIRC communications advisor Joe Walker, walkercom2@aol.com or 703-491-3301.

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