ASPHALT INSTITUTE

Peter T. Grass
President

April 6, 2009

TSCA Confidential Business Information Center (7407M)
EPA East - Room 6428 Attn: Section 8(e)
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW
Washington, DC 20460-0001

ATTN: TSCA Section 8(e) Coordinator

Dear Sir / Madame:

In accordance with Section 8(e) of TSCA, 15 U.S.C. §2607(e), the Asphalt Institute is writing on behalf of its member companies to report on information arising from an industry-sponsored mouse skin carcinogenicity study of an asphalt fume condensate. The study was conducted by MPI Research Inc. Mattawan, MI, under the direction of the Asphalt Institute, and according to Good Laboratory Practice standards. Funding was provided by the Asphalt Roofing Environmental Council, a consortium consisting of the Asphalt Institute, the Asphalt Roofing Manufacturers Association, and the National Roofing Contractors Association. Asphalt Institute member representatives assisted in the technical oversight of the study. Their names and addresses will be provided upon request.

Two samples of asphalt fume condensate were tested. Both samples were derived from Type III (Built Up Roofing) oxidized roofing asphalt (CAS# 64742-93-4). One fume condensate sample was generated in a laboratory setting according to a procedure established by NIOSH (Niemeier, et al, 1988). This sample was identified as LR-A. The second sample was collected in the field from the headspace of a bulk storage tank containing the same asphalt starting material and was identified as TR-A. The samples are fully described in Kriech et al. (2007).

The draft laboratory report of the study indicates that both samples were tumorigenic to mouse skin. Squamous cell carcinomas were observed in eight of the 80 mice treated with TR-A and 35 of the 80 LR-A treated mice. Time to tumor was longer in TR-A treated mice in comparison to LR-A treated mice. Laboratory-generated asphalt fume condensates were previously reported to be tumorigenic to mouse skin (Niemeier, et al, 1988). The current finding with LR-A essentially

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replicates that earlier finding. However, laboratory-generated (LR-A) fumes are not representative of fumes present in roofing operations (Kriech et al, 2007). In this respect, sample TR-A differs from LR-A in that TR-A is similar to asphalt fume collected in a roofing operation worksite setting using the same asphalt (Kriech et al 2007).

Animals in both treatment groups developed marked skin irritation at the site of application during the course of this study. Previous studies of petroleum liquids having a similar distillation range as the test materials demonstrated that skin irritation may play an important role in the subsequent development of skin tumors. What effect, if any, skin irritation had on the development of skin tumors in this study is unknown.

The relevance of these findings to human health is uncertain at this time.

If you need additional technical information please contact Dr. Earl W. Arp at the address below.

Sincerely,

Peter T. Grass
President

References:

1. Niemeier et al (1988), A comparison of the skin carcinogenicity of condensed roofing asphalt and coal tar pitch fumes. In Cooke, M and Dennis, AJ, Eds, Polynuclear Aromatic Hydrocarbons: A decade of progress, 10th International Symposium on Polynuclear Aromatic Hydrocarbons. Batelle Press, pg 609- 647.

2. Kriech, Anthony J., Osborn, Linda V., Wissel, Herbert L., Redman, Adam P., Smith, Lisa A. and Dobbs, Todd E., 'Generation of Bitumen Fumes Using Two Fume Generation Protocols and Comparison to Worker Industrial Hygiene Exposures', Journal of Occupational and Environmental Hygiene, 4:1, 6 -19.