In the opinion of the Pavement Coatings Technology Council (PCTC) the recent MSNBC internet story by Mr. Robert McClure of Investigate West draws inaccurate or grossly exaggerated conclusions concerning the impact of refined tar-based sealer on the environment or humans. After review of the science used to develop the conclusions used by Mr. McClure, it has been determined by an independent international environmental testing and research firm, that the science was flawed. The following are comments from the PCTC concerning the recent article by Robert McClure of Investigate West;

- **Author Bias** -- It is important for all readers to note that Mr. McClure interviewed Anne LeHuray, Executive Director of the PCTC, and Dr. Robert DeMott of Environ International where much of the contents of Mr. McClure’s article was shown to be wrong or grossly exaggerated. Yet, Mr. McClure chose to write only one side of the story without mention (except for one reference to Anne) of credible sources refuting his allegations.

- **Rush to Judgment** – In the subject article there was considerable attention given to the high levels of polycyclic aromatic hydrocarbons (PAHs) in the Barton Creek which is in Austin TX. Coal tar sealers were blamed for this. What was unsaid was that re-testing of this same body of water by independent environmental experts over two years after coal tar sealers were banned in Austin showed no discernable difference in either the amount or types of compounds discovered in the initial testing. If coal tar sealers were the cause of the high PAH levels -- why was there no improvement after all this time?

- **Harmful Health Effects of Coal Tar Sealers to Humans** -- There are no published studies linking the use of refined tar-based sealers (during and after application) to harmful effects in humans or animals. The International Agency for Research on Cancer (IARC) has not classified coal tar-based sealers or the refined coal tar used to manufacture coal tar sealer as a human carcinogen. Further, no epidemiology studies have been conducted which show a cancer link to refined tar-based sealers. References made by Mr. McClure to the incidence of scrotal cancer in chimney sweeps during the 1770s have been attributed to poor personal hygiene and involved chimney soot which is not analogous to refined coal tar. Similarly, references to the carcinogenicity of
creosote are completely false. Creosote is NOT classified by IARC as a human carcinogen. This fact is supported by a 2005 epidemiology study completed by Wong and Harris (Wong and Harris, Journal of Occupational and Environmental Medicine, Vol. 47, pages 683-697, July 2005) who found no increase in mortality for creosote wood treating workers from any causes including cancer. Additionally, the US Food and Drug Administration (FDA) has authorized use of coal tar soaps, ointments and shampoos for treatment of seborrheic dermatitis, psoriasis and atopy (eczema) based on epidemiological data submitted to FDA by Neutrogena Corporation.

- **Refined Coal Tar is Not a Waste Product** -- as stated by Mr. McClure but rather is a selectively manufactured product meeting quality and performance specifications detailed by the American Standards for Testing Materials (ASTM) and federal road tar specifications RP-355 for use in coal tar-based sealer emulsions. Refined tar-based sealer is NOT formulated from crude coal tar itself or coal tar pitch but rather from a refined coal tar fraction (RT-12) as specified in ASTM D-490.

- **PAH Sources in our Daily Environment** -- Although coal tar-based sealers are the focus of this article, PAHs are present in everyday urban life. Examples would include:
  - Automobile Exhaust
  - Power Generation
  - Motor Oil
  - Automobile/Truck tires
  - Charcoal Grilling
  - Asphalt Pavement
  - Atmospheric Fallout

- **USGS 2005 Barton Creek City of Austin Study** – Research, including a scientific review of the Austin study, commissioned by the Pavement Coatings Technology Council (PCTC) shows that crankcase oil and vehicle emissions, not runoff from pavement sealed with refined coal tar emulsion, is consistently identified as the primary source of PAHs found in the urban environment. In a scientific review of the Austin studies, conducted by Dr. Robert DeMott and ENVIRON International, the PAH samples in soil and roadway runoff materials in Austin were found to be consistent with typical urban background levels of PAHs. Dr. DeMott found no cause for concern for elevated exposure from PAHs in the water or soil. Because so many other “activities of urbanization” are proven sources of PAHs, including vehicle exhaust, motor oil, rubber tires particles and debris from asphalt roads. A follow-up study conducted by ENVIRON International sampled sediments in Austin before and approximately 2.5 years after the city banned the use of refined coal tar based sealants showed no discernable difference in either the amount or types of PAHs were found in the before and after samples.
• US Agency for Toxic Substances and Disease Registry (ATSDR) – The City of Austin decided to institute a ban on refined tar-based sealant even though a health consultation conducted by the ASTDR concluded: We did not find any information to support contention that swimming every day in Barton Springs would result in adverse health effects. Thus, we have concluded that swimming and playing in Barton Springs Pool poses no apparent public health hazard. This is an important study and significant findings which were completely ignored in the McClure article.

• House Dust Study -- Chemicals found in house dust samples and that comprise polycyclic aromatic hydrocarbons (PAHs) are ubiquitous in the environment and come from many sources. Individual components of PAH mixtures have widely differing health effects. The reported finding of the presence of the PAH substance benzo(a)pyrene in driveway dust "thousands of times the level that would trigger a cleanup at a toxic-waste site" is irresponsibly alarmist and lacks evidence as to its origin or its purported relationship to sealant. The study’s evaluation of other sources of PAHs in house dust is incomplete and inadequate to draw the conclusions cited.

• Refined Coal Tar Volume Applied -- The volume of refined coal tar sealer used in Texas stated in the article (59 million gallons per year) is so grossly overstated that it borders on ridiculous.

• Refined Coal Tar Sealer Benefits -- For more than six decades, refined coal tar sealer has been safely used to protect paved surfaces around the world. Pavement sealed with refined coal tar emulsion makes paved surfaces last longer, helps them hold up better under heavy use and improves their appearance. Refined coal tar sealants save money because paved surfaces need to be sealed less frequently and need to be replaced less often.

• Quotations used -- Please note that all the quotations in the article from outside sources use terms such as "could be" or "potential" and suggest further study. Only the USGS, based primarily on a single study in Austin, Texas is making absolute statements.

The PCTC will continue to aggressively challenge inaccurate written or verbal statements concerning all types of pavement sealers. We will continue to have a dedicated effort to ensure that sealing industry voice is heard on these important issues.

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