Sayers, Margery

From: joel hurewitz <joelhurewitz@gmail.com>
Sent: Sunday, September 30, 2018 10:03 PM
To: CouncilMail
Subject: CB60-2018 - Response to the Testimony of Chris Mariani
Attachments: Response to Testimony of Mariani CB60-2018.pdf

Dear Council,

Prior to the legislative hearing on September 17, I had given the issue of coal tar sealants just casual attention. Because of issues at my condominium with non-coal-tar sealants, I was cognizant in general of the environmental concerns. I was aware that Councilman Weinstein had filed the bill in response to research by elementary students, but had not studied the bill or the specific issues. I reentered the Banneker Room specifically to hear the students shortly after they had started their presentation. Probably like most people in the chamber, I was impressed with the students' presentation and their grasp of scientific concepts years in advance of studying them in high school biology and chemistry. I learned about PAH's and the work of the USGS on coal-tar sealants. I had not realized that the USGS worked on environmental pollution.

I then listened to the opponents of the bill. In particular, the comments of Chris Mariani caught my attention. He made his convoluted slippery slope argument that it would be detrimental to his company's business if Baltimore County passed this bill. He also made dubious, emphatic claims about the lack of scientific support for the students' argument. I rewatched his testimony to confirm that I had heard it correctly. The attached response to his testimony is the result of my research the past two weeks.

Sincerely,

Joel Hurewitz

A RESPONSE TO THE TESTIMONY OF CHRIS MARIANI, GEMSEAL PAVEMENT PRODUCTS FOR CB60-2018 – AN ACT TO BAN THE SALE OR USE OF CERTAIN COAL-TAR AND SIMILAR PAVEMENT SEALING PRODUCTS

by

Joel Hurewitz

This memorandum is in response to the oral and written testimony on CB60-2018 made to the County Council by Chris Mariani, Southern Regional General Manager for GemSeal Pavement Products. In his oral testimony to the Council on September 17, 2018 Mariani stated in part:

"The other points I would like to make is that there is no agency or entity including International Agency for Research on Cancer that has deemed coal-tar pavement sealers [a} carcinogen. The USGS has never performed a study to determine if coal-tar sealer is a carcinogen. In 15 years since the USGS has targeted coal-tar sealers, they have not been able to establish a link to adverse human health effects or cancer to humans from the use of pavement sealer. Because in the 60 plus years that coal-tar pavement sealer has been available, there is no history by OSHA or documented health adverse effects of this product like smoking or asbestos. . . . I would like a fair chance to present data as well."

These statements taken as a whole are demonstrably false. They show that at best Mariani is naively unaware of the scientific reports on coal-tar pavement sealers or at worst was purposefully deceptive in his testimony to the Council.

International Agency for Research on Cancer

The International Agency for Research on Cancer (IARC) has in fact concluded that coal-tar pavement sealers are a carcinogen: "**2. Cancer in Humans** In IARC Monograph Volume 92 (IARC, 2010) it was *concluded that there is sufficient evidence in humans for the carcinogenicity of occupational exposures during paving* and roofing with coal-tar pitch. This was based on studies of pavers and roofers who presumably had been exposed to coal-tar pitch (and often also to bitumen), which suggested *increased cancer risks in these occupations*. . . . Since the previous evaluation (IARC, 2010) a few additional studies have been published with information on paving with coal-tar pitch and associated cancers." IARC Monographs -100F Coal-Tar Pitch (emphasis added) p. 163-164. https://monographs.iarc.fr/wp-content/uploads/2018/06/mono100F-17.pdf In addition, the IARC also reports that coal-tar pitch studies caused cancer in mice: "**3. Cancer in Experimental Animals** Six coal-tar pitches and three extracts of coal-tar pitches all produced skin tumours, including carcinomas, when applied to the skin of mice." *Ibid* at p. 164.

The USGS Studies

The USGS does in fact claim that its studies have concluded that parking lot sealers contain PAHs and are suspected human carcinogens: "**Abstract** Studies by the U.S. Geological Survey (USGS) have identified coal-tar-based sealcoat-the black, viscous liquid sprayed or painted on asphalt pavement such as parking lots-as a major source of polycyclic aromatic hydrocarbon (PAH) contamination in urban areas for large parts of the Nation. Several PAHs are suspected human carcinogens and are toxic to aquatic life." https://pubs.er.usgs.gov/publication/fs20113010 and https://pubs.usgs.gov/fs/2011/3010/ The later webpage was last update in November 2016 and remains online in spite of efforts of the

present Administration to hide reports on adverse environmental problems and especially those detrimental to the coal industry. The USGS report "Coal-Tar-Based Pavement Sealcoat, Polycyclic Aromatic Hydrocarbons (PAHs), and Environmental Health"again restates the above-quoted statement. Page 1 https://pubs.usgs.gov/fs/2011/3010/pdf/fs2011-3010.pdf

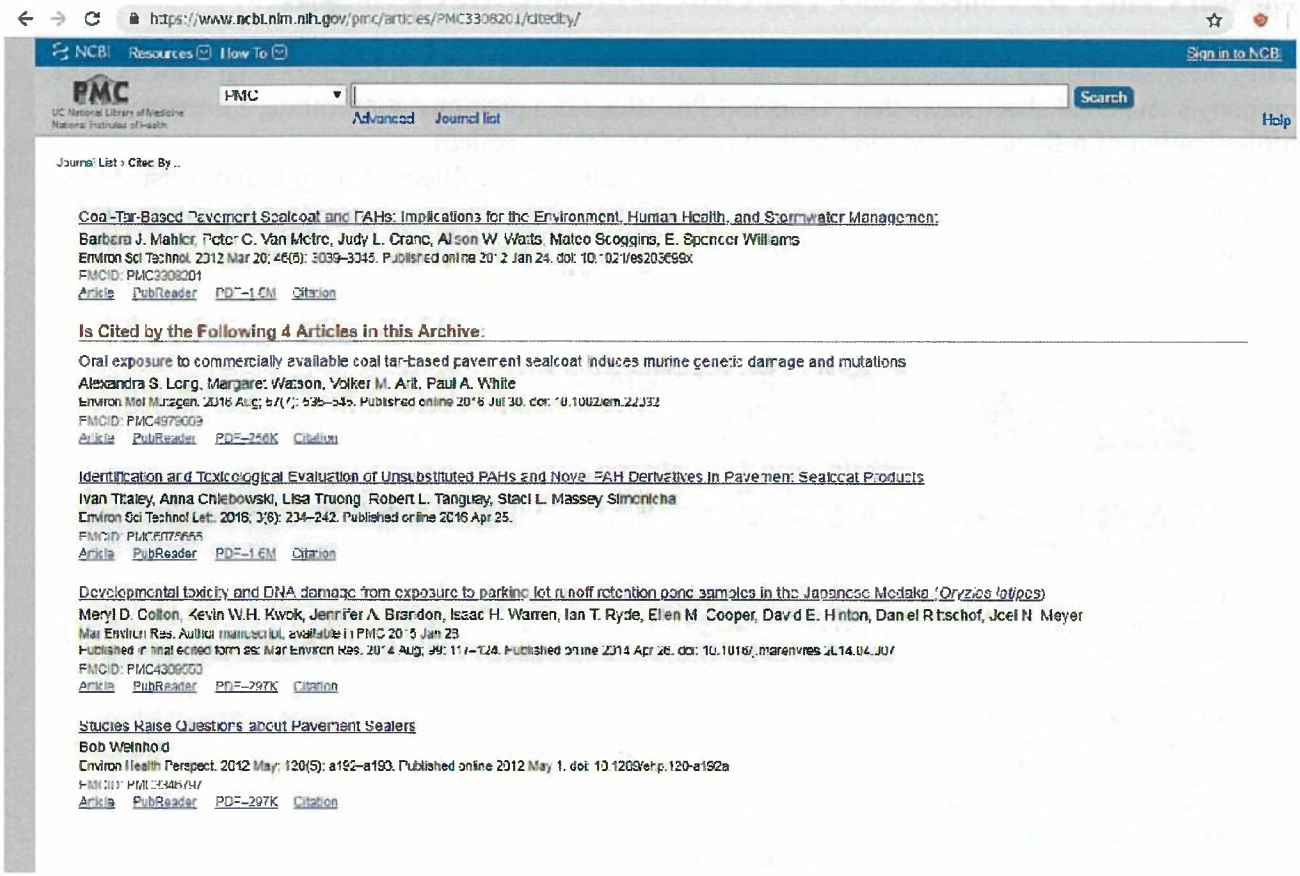
The study "Coal-Tar-Based Pavement Sealcoat and PAHs: Implications for the Environment, Human Health, and Stormwater Management" (Mahler/Van Metre) specifically states: "Coal-tar-based sealcoat products, widely used in the central and eastern U.S. on parking lots, driveways, and even playgrounds, are typically 20–35% coal-tar pitch, a known human carcinogen that contains about 200 polycyclic aromatic hydrocarbon (PAH) compounds." https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3308201/

In the section entitled "Coal-Tar Based Sealcoat: A Newly Identified Source of PAHs: the study states: "Coal-tar pitch, a known (Group 1) human carcinogen, is the residue remaining after the distillation of crude coal-tar (a byproduct of the coking of coal), and contains about 200 PAH compounds. Most coal-tar-based sealcoat products consist of 20–35% coal-tar pitch as the binder. Asphalt is the residue remaining after the distillation of crude oil and is the binder in asphalt-based sealcoat products. Although the two sealcoat product types are similar in appearance, PAH concentrations in coal-tar-based sealcoat are about 1000 times higher than those in asphalt-based sealcoat." https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3308201/

In the section "Human-Health Concerns" is the statement: "coal-tar and coal-tar pitch are listed as Group 1 (carcinogenic to humans) carcinogens, and the U.S. EPA currently classifies seven PAH compounds as probable human carcinogens (Group B2): benz[a]anthracene, benzo[a]pyrene, benzo[b]fluoranthene, benzo[k]fluoranthene, chrysene, dibenz[a,h]anthracene, and indeno[1,2,3-cd]pyrene. coal-tar itself is a powerful mutagen: The mutagenicity index for coal-tar is about 1000 times that of asphalt cements." https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3308201/

Additionally, in his written testimony, Mariani states that "The mission of the USGS does not include determining the carcinogenicity of any product or substance." While a parsing of this sentence might be technically correct regarding the USGS's mission, the biography section of the study states that "Barbara Mahler, Ph.D., and Peter Van Meter, Ph.D., are Research Hydrologists at the U.S. Geological Survey Texas Water Science Center, where they investigate occurrence of and trends in sediment-associated contaminants. Their recent research has focused on identifying sources of polycyclic aromatic compounds to the environment." https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3308201/ So USGS employees are in fact studying PAHs in the environment.

Additionally, in his written testimony Mariani claims that the students' research report did not make an "effort to interview any of the scientists that peer reviewed the USGS research and found it to be deeply flawed," yet though he listed a number of "scientists" he failed to provide a citation to any actual peer reviewed reports. Contrary to Mariani's assertion the research studies of Mahler and Van Metre have been cited with approval and/or support in several other studies which are listed on this webpage of the National Center for Biotechnology Information, U.S. National Library of Medicine:



https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3308201/citedby/

OSHA

There is in fact a history of acknowledgment by OSHA regarding coal-tar. This webpage lists numerous studies: https://www.osha.gov/SLTC/coaltarpitchvolatiles/hazards.html The heading states: "**Hazard Recognition** coal-tar pitch volatiles (CTPVs) are found in the industry when heating of coal-tar or coal-tar pitch takes place. Once the pitch is heated, chemicals vaporize and may be inhaled by workers. Industries where workers are potentially exposed to CTPVs include coking, roofing, *road paving*, aluminum smelting, wood preserving and any others where coal-tar is used. The following links provide information about the health effects of CTPVs:" (emphasis added).

GemSeal's Safety Data Sheets Show That Coal-Tar Products Are Carcinogens

Lastly, Mariani appears to be naively unaware of the information on his company's own website. The company's technical sheet states that "GemSeal Pro-Blend is a premium concentrate, formulated by emulsification of refined *coal-tar* and asphalt resins"(emphasis added) https://www.gemsealproducts.com/wp-content/uploads/2016/05/ProBlend_6-17.pdf and is listed as a potential mutagen and carcinogen in the safety data sheets. https://www.gemsealproducts.com/wp-content/uploads/2016/05/pro-blend-sds.pdf

GemSeal® Pro-Blend

Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012.

Date of issue: 02/01/2016 Version: 1.0

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form : Mixture

Product name. : GemSeal® Pro-Blend

Product code : 60310023 – 5 gal

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture : Various.

1.3. Details of the supplier of the safety data sheet

GemSeal Pavement Products
3700 Arco Corporate Drive, Suite 425
Charlotte, NC 28273 - USA
T 866-264-8273 Tech Service: Monday - Friday; 8:00am - 5:00pm EST

1.4. Emergency telephone number

Emergency number : CHEMTREC (800) 424-9300

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GHS-US classification

Eye Irritation 2A
Skin Sensitization 1
Germ Cell Mutagenicity 1B
Carcinogenicity 1A
Reproductive Toxicity 1B
Specific target organ toxicity — Repeated exposure, Category 1

2.2. Label elements

GHS-US labelling

Hazard pictograms (GHS-US) :

GHS07 GHS08

Hazard statements (GHS-US) : May cause an allergic skin reaction. Causes serious eye irritation. May cause genetic defects. May cause cancer. May damage fertility or the unborn child. Causes damage to organs through prolonged or repeated exposure.

Precautionary statements (GHS-US) : Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe dust/fume/gas/mist/vapours/spray. Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves/protective clothing/eye protection/face protection. If on skin: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. Take off contaminated clothing and wash it before reuse. If exposed or concerned: Get medical advice/attention. Store locked up. Dispose of contents and container in accordance with all local, regional, national and international regulations.

2.3. Other hazards

No additional information available

2.4. Unknown acute toxicity (GHS-US)

33 % of the mixture consists of ingredient(s) of unknown acute toxicity.

Technical Data

Pro-Blend *Pavement Sealer Concentrate*

DESCRIPTION:

GemSeal® Pro-Blend is a premium concentrate, formulated by emulsification of refined coal tar and asphalt resins, designed for application to asphalt pavement surfaces. GemSeal® Pro-Blend extends the service life and enhances the appearance to provide a cost effective preventive maintenance coating.

Conclusion

Therefore, for the reasons stated above the Council should disregard the testimony of Mariani as being incorrect, incomplete, misleading and/or purposefully deceptive.

AmericanCoatings
ASSOCIATION℠

September 17, 2018

Mary Kay Sigaty, Chairperson
Howard County Council
George Howard Building
3430 Court House Drive
Ellicott City, Maryland 21043

RE: Bill No. 60-2018 -Ban the sale or use of coal tar and pavement sealing products

Dear Chairwoman Sigaty and Honorable Council Members:

The American Coatings Association (ACA) is a voluntary, nonprofit trade association that represents the paint and coatings industry and the professionals who work in it. ACA membership includes paint and coatings manufacturers, raw materials suppliers, distributors, and technical professionals. ACA membership companies collectively produce some 95% of the total dollar volume of architectural paints and industrial coatings produced in the United States. As a result, ACA and its members are tracking the development of this bill very closely.

Bill No. 60-2018 proposes to ban the sale or use of certain coal tar and similar pavement sealing products in the County. Pavement sealers are used to protect and extend the life of asphalt. The ban is premised on the false assertion that refined tar- based pavement sealer is the source of high percentages of Polycyclic Aromatic Hydrocarbons (PAHs) found in lakes, streams, and storm water retention ponds, even though studies show that wood burning from fireplaces and stoves are actually the largest source of PAHs at about 30%.[1] By contrast, pavement sealant contributes less than 1% of the total. Moreover, Maryland's Clean Water Act Section 303(d) reports found no instance of PAHs identified as a cause of impairment of water quality anywhere in the state. Furthermore, there is no evidence of any negative health impacts directly attributable to refined tar. Instead, refined tar can be found in soaps, shampoos and creams approved for over-the-counter sales to treat skin disorders.

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[1] Valle, S., M. A. Panero, and L. Shor, 2007, Pollution Prevention and Management Strategies for Polycyclic Aromatic Hydrocarbons in the New York/New Jersey Harbor, Industrial Ecology, Pollution Prevention and the NY/NJ Harbor Project of the New York Academy of Sciences, New York, New York, New York Academy of Sciences.

This proposed ban is a draconian response to false, unscientific assertions that would have a major negative impact on the refined tar industry. For all of these reasons, ACA urges the Howard County Council to reject Bill No. 60-2018.

For more information contact:
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