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FOR IMMEDIATE RELEASE  
November 22, 2013

## **US Geological Survey Modeling of PAH Sources Is Flawed, Newly Published Paper Concludes**

ALEXANDRIA, Virginia, Nov. 22, 2013– Policy makers have been provided with flawed environmental modeling results regarding the sources of polycyclic aromatic hydrocarbon compounds (PAHs) in urban sediments, according to a [paper just accepted](#) by *Integrated Environmental Assessment and Management* (IEAM). The flawed model incorrectly identifies a specific type of pavement sealer as a significant source of PAHs even in localities where the product is not known to have been used. IEAM is peer reviewed and published by the Society of Environmental Toxicology and Chemistry with the mission of “bridging the gap between scientific research and the application of science in decision making, policy and regulation, and environmental management.”

Titled *Parsing Pyrogenic PAHs: Forensic Chemistry, Receptor Models, and Source Control Policy*, the paper reviews the strengths and limitations of methods used to identify sources of pollution called “receptor models,” which increasingly are being used to help identify sources of contamination in environmental forensics studies. As a case study, authors Kirk O’Reilly, Jaana Pietari and Paul Boehm of the science consulting firm Exponent ® looked at “the actions taken by researchers at the US Geological Survey’s (USGS) Texas Water Sciences Center [who] have identified refined tar-based sealer (RT-sealer) as a source of PAHs in urban sediments.” A detailed analysis of two instances in which USGS modeling was considered by policy makers - Austin, TX and the State of Washington – generated results by O’Reilly *et. al.* that “do not support the claim that parking-lot sealers are a significant source of PAHs in urban sediments.” Regarding Austin, the analysis presented in the case study confirms previously published studies that show sealers were not an identifiable source of PAHs in Austin sediments before or after the City banned use of the product. Indeed, Austin sediments containing the highest PAH concentrations tend to be less similar to the signature of RT-sealer than sediments with lower PAHs. The paper is available online [here](#).

[PavementCouncil.org](#) funded evaluation of environmental forensic methods, including receptor models, as part of an effort to understand how pavement sealers and other common sources of PAHs, such as vehicle traffic and burning wood, may be contributing to PAHs in the environment. The analysis presented in the newly published paper adds to the evidence that the

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USGS is an agency with an agenda. [PavementCouncil.org](http://PavementCouncil.org) has filed three Data Quality Act challenges with the USGS (available [here](#), [here](#) and [here](#)) which raise additional concerns regarding the quality of USGS data, methodologies and conclusions as they pertain to the impact of pavement sealers on the environment. Several more DQA petitions are planned. PavementCouncil.org contends that the actions of the USGS researchers, as described in the O'Reilly et al. paper and in the above mentioned DQA challenges, exemplify a phenomenon known in the scientific literature as "White Hat Bias," whereby objective science is adversely influenced "... by feelings of righteous zeal, indignation toward certain aspects of industry, or other factors." First identified in the field of obesity research, it is now feared that White Hat Bias has worked its way in the field of environmental research as well.

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### **ABOUT PAVEMENTCOUNCIL.ORG**

Members of [pavementcouncil.org](http://pavementcouncil.org) are manufacturers of pavement sealants and their suppliers. Also known as the Pavement Coatings Technology Council (PCTC), PavementCouncil.org is a not-for-profit trade association engaged in research, education, training and communications with the goal of improving the public's understanding of the pavement coatings business. Most of the companies involved in the pavement coatings industry are small and medium size businesses that generate well-paying jobs and support local economies. They are the types of businesses that are proud to be a part of your community.

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If you would like more information about this topic, or to schedule an interview, please send an email to [news@pavementcouncil.org](mailto:news@pavementcouncil.org). Additional background and other information are available at [pavementcouncil.org](http://pavementcouncil.org).



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