

ENVIRONMENT AND CLIMATE CHANGE CANADA ISSUES REQUESTS FOR COMMENTS

Consultation Document on proposed Regulations for Polycyclic Aromatic Hydrocarbons (PAHs) in sealant products (the proposed Regulations).

Based on the information available, an assessment, published in 1994, concluded that PAHs, as a class, are toxic under the Canadian Environmental Protection Act (CEPA), resulting in the addition of PAHs to Schedule 1 of CEPA.

During the consultations on the Proposed Regulations for Coal Tar-Based Sealant Products, comments were received on possible replacement products to coal tar-based sealant products such as ethylene cracker residue (ECR, which contains high levels of Polycyclic Aromatic Hydrocarbons [PAHs]).

The Government of Canada has prepared this consultation document to inform stakeholders and solicit feedback on the key elements of the proposed Regulations. All written comments received during the consultation period will be considered during development of the proposed Regulations.

The due date for submitting comments on this consultation document is October 22, 2022. Instructions for sending in comments are within the consultation document.

JOURNAL SUBMISSION: EVALUATION OF GENERIC PAH PROFILES COMMONLY USED IN RECEPTOR MODELS: IMPLICATIONS FOR SOURCE CONTROL POLICY

Kirk O'Reilly, Senior Managing Scientist at Exponent, a longtime partner of PCTC, has successfully submitted a manuscript titled the Evaluation of Generic PAH Profiles Commonly Used in Receptor Models: Implications for Source Control Policy, to Environmental Forensics Journal. Among several outstanding points, O'Reilly's manuscript covers the following:

- Li's paper has been the go-to resource for arguments against PAHs and more specifically, their sources. However, this is mostly because it's been used so often that nobody has taken the time to review his approach to verifying, and therefore validating, correct input models.
- O'Reilly recommends a stronger look at source control policies because of this legacy approach toward validation - i.e., just assuming Li's modeling was correct.
- Furthermore, researchers continue to rely on the models and data represented in literature, essentially codifying the assumptions as correct and all-encompassing. Thus, this literature-based data becomes the "default source" for foundational arguments.
- O'Reilly's paper challenges this by looking at Li et al., exploring Li's profiles through the lens of statistical methods to evaluate accuracy represented in his work.
- O'Reilly concludes that due to "high intrasource variability and intersource similarities" Li's model should not be used as the baseline for modeling and setting source control policies. If accepted, this can essentially reset how modeling, and how we view PAH sources, is defined.

ANNE LEHURAY TO PRESENT AT THE BATTELLE SEDIMENT CONFERENCE IN AUSTIN, JANUARY.

Former Executive Director, Anne LeHuray, successfully submitted an abstract to the Battelle Sediment Conference to be held in Austin next January. An overview of her program can be found below.

In the first years of the 21st century the City of Austin (CoA), TX, thought they had identified a problem – polycyclic aromatic hydrocarbons (PAHs) in city watersheds – and also believed they had identified the cause of the problem – parking lots treated with refined coal tar-based pavement sealant (RTS). While the PAHs were not present at levels warranting special attention, the CoA sought assistance from state and federal agencies. Working with the city, hydrologists at US Geological Survey's (USGS) Austin office conducted a study and generated the hypothesis that RTS “may dominate loading of PAHs to urban water bodies in the United States” (Mahler et al. 2005, EST39:5560) Since that time there has been a steady stream of publications focused on this issue. Environmental forensics has been a critical component of many of the studies. Papers authored by USGS and its collaborators make unequivocal claims about RTS, while other groups continue to identify significant problems with many of USGS's methods and interpretations.

This paper surveys the nearly 2-decade trip winding through several branches of the science of PAHs in the environment with the objective of testing a hypothesis generated in Austin.