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Via e-mail: Wong.Diana-M@epa.gov

SUBJECT: Chemical Assessment Advisory Committee (CAAC) Review of EPA's Draft Benzo(a)pyrene (BaP) Integrated Risk Information System (IRIS) Toxicology Review of BaP

On behalf of the American Petroleum Institute I am pleased to have this opportunity to bring to the members of the Chemical Assessment Advisory Committee (CAAC) some scientific issues that are raised by the present version of the IRIS Toxicological Review of Benzo(a)pyrene. In the limited time that I have I will provide a number of issues that I respectfully request that the members of the CAAC give special attention to during your review of the EPA's review of Benzo(a)pyrene.

Dermal slope factor – The unprecedented development of a cancer slope factor for dermal exposure to B(a)P. In the absence of any accepted EPA guidelines for assessing dermal exposure EPA has developed a slope factor which when compared to real world experience fails a common sense test which suggests that additional methods for calculating a slope factor should be considered.

The decades old experience with coal tar containing shampoos and treatment for skin diseases like psoriasis should be given some credence rather than being summarily dismissed as irrelevant.

The MOA for carcinogenicity is assumed to be based on mutagenicity with inadequate justification. Mutagenicity does not necessarily lead to carcinogenicity. The finding of DNA adducts likewise does not rule out other MOAs and which should be more thoroughly discusses.

Finally, EPA is inconsistent in the way that they consider the validity of data from mixtures. No human is exposed to pure B(a)P . B(a)P is only encountered outside of the laboratory as a complex mixture. Its concentration in these mixtures, soot, coal tar, cigarette smoke etc. is a small fraction of the total PAHs in these matrices. In earlier an CAAC meeting about trimethylbenzenes there was much discussion about using toxicology data from a solvent mixture in which trimethylbenzenes constitute more than 50% of the test material. EPA's position in the toxicology review and the response to comments was that mixtures such as that could not provide valid information about toxicity. Today, the entire toxicology assessment relies on complex mixtures of other PAHs, in which many components are considered to be carcinogens. I ask if such inconsistency is warranted and to what degree should mixture-based data be used?

I appreciate the time and effort that goes into a review such as this, and that there are stacks of reports, reprints and comments to wade through. I ask that you consider the topics above for possibly some extra consideration. I also find the Department of Defense comments to be well thought out and documented.

Regards,

Patrick Beatty