Reviewer's report

Title: Biomarkers of naphthalene in pregnant women: an investigation of personal and indoor air sources.

Version: 1
Date: 19 November 2013
Reviewer: Birger Heinzow

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This a valuable study providing interesting information on personal exposure to naphthalene as measured in air, urine and breast milk in the prenatal and post-natal windows in Canadian women. Analytical methods are state-of-the-art. Naphthalene exposure is of public health relevance considering the recent hypothesis on Urinary naphthol metabolites and chromosomal aberrations in 5 yr old children—by Manuela A. Orjuela* et al. in Cancer Epidemiol Biomarkers Prev Published OnlineFirst May 9, 2012.

Thus this meticulous study, providing the 95. percentile in table 2 would be much appreciated. One might also add diesel as an exposure source (Kuusimäki L, Peltonen Y, Mutanen P, et al. (2004) Urinary hydroxy-metabolites of naphthalene, phenanthrene and pyrene as markers of exposure to diesel exhaust. Int Arch Occup Environ Health 77: 23–30).

The low exposure of the participants reported is in agreement with NHANES data (Centers for Disease Control and Prevention, Atlanta. www.cdc.gov/exposure report) and a previous Canadian study (Bouchard M, rt al. (2001) Biological monitoring of environmental exposure to polycyclic aromatic hydrocarbons in subjects living in the vicinity of a creosote impregnation plant. Int Arch Occup Environ Health 74: 505–513), indicating that the home environment seems to be the major exposure route indeed.

1. Is the question posed by the authors new and well defined? - Yes
2. Are the methods appropriate and well described, and are sufficient details provided to replicate the work? - Yes
3. Are the data sound and well controlled? - Yes
4. Does the manuscript adhere to the relevant standards for reporting and data deposition? - Yes
5. Are the discussion and conclusions well balanced and adequately supported by the data? Yes
6. Do the title and abstract accurately convey what has been found? - Yes
7. Is the writing acceptable? -Yes
Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:
I have no conflict of interest.