Reviewer’s report

Title: Integrated Exposure Assessment of Sewage Workers to Genotoxicants: an Urinary Biomarker Approach and Oxidative stress Evaluation

Version: 1 Date: 16 December 2010

Reviewer: nuha El Sharif

Reviewer’s report:

Dear Authors

Thank you for this type of research that is of great importance in the field of occupational health. The MS is well written and all items are presented in a clear sequence.

I would like the authors to consider the following comment.

Major Compulsory Revisions

In the discussion, the authors presented the study limitations. They mentioned that sample size limited the study findings. Sample size issue: As mentioned previously (Al Zabadi et al. 2008) the authors faced a high non-response rate that decreased the study sample size to 34 underground sewage workers and a control group of 30 office workers, instead of 75 participants in each group. This non-response affected the study type 2 error (#) as they mentioned and decreased it to a much lower level than the authors suggested when they calculated the study sample size, i.e. # =5% and power expectation of 80%). What were the factors that affected the workers' response? How do the authors see that this non-response affects their study power and results? Do they have a description of the non-respondents?

Minor Essential Revisions

1- Using the word “NOW” at the beginning of some sentences or paragraphs is not needed, such as page 3 paragraph 3 and in page 13.
2- Results, second line. “The mean ages… “. Authors forget mentioning that between brackets (SD) is standard deviation.
3- Table 4 page 26 has to be better presented, so please modify its format.

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: Yes, and I have assessed the statistics in my report.

Declaration of competing interests:
I declare that I have no competing interests