Reviewer's report

Title: The Effect of Ambient Air Pollution on Respiratory Health of School Children: a Panel Study

Version: 1 Date: 5 April 2007

Reviewer: Lisbeth E. E Knudsen

Reviewer's report:

General
The manuscript is well written and reports on an extensive well conducted study with a group of non-tobacco smoke air pollution exposed school children and respiratory effects. It is claimed that no excess oxidative stress arises from exposure to wood combustion products as no increases in the biomarker of exhaled hydrogen peroxide was found. This biomarker is relatively new and the sensitivity should further be discussed for the justification of the conclusion of the biomarker not being suitable for use as a biomarker of lung inflammation due to air pollution exposure

Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)

I recommend to include more text explaining the figures
Figure 1 and 2: It should be clarified where the monitors for sampling were placed
Figure 3 should refer to the publication reporting more in detail about the 1-OHP measurements (ref 13). The figure is almost identical to figure 1 in ref 13 except for swift of two bullet plots

Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)
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Discretionary Revisions (which the author can choose to ignore)

I am not sure the report is fully updated with recent European studies of respiratory health and Child exposure, eg by the group of Anette Peters

What next?: Accept after minor essential revisions

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.