

## **Reviewer's report**

**Title:** PM2.5 metal exposures and night heart rate variability: A panel study of welders

**Version:** 1 **Date:** 31 January 2008

**Reviewer:** Morton Lippmann

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Review:

The paper poses a question of current interest to the occupational and environmental health communities, i.e., effects of PM constituents on HRV, and yields results that may be useful to others concerned about welding fumes in the occupational health community. The relevance to those concerned about the effects of PM constituents in the ambient air is severely limited by the issue of extrapolation to much lower concentrations. Also, as acknowledged by the authors at the top of Page 14, by the chemical form and solubilities of the metals. The metals released by welding are likely to be present as oxides, while those resulting from fossil fuel combustion or smelting are more likely to be sulfates, and therefore more bioavailable. The authors likely have sulfur data from their XRF analyses, and may wish to add some discussion on this issue.

I had no problems with regard to the methods, data soundness, method of presentation, other aspects of the Discussion, and Conclusions. The Title, and Abstract were fine.

I found one typo. On Table 5, the Model 4 Heading should have a beta rather than a capital B.