Reviewer's report

Title: Characterization of exposures to cleaning products used for common cleaning tasks in hospitals -a pilot study

Version: 2 Date: 22 October 2008

Reviewer: Peder Wolkoff

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Major Compulsory Revisions
The use of the word “hazardous” throughout the manuscript is in my opinion an overstatement. It implies that the chemicals or ingredients already have been doomed as causing adverse effects. In my opinion it would be more correct to talk about: chemicals or ingredients of concern. If the authors continue to use the old terminology, it is mandatory to modify the criteria on page 5 by:

An ingredient was considered to be potentially more hazardous if:......

Minor essential revisions:

Page 3:
The Rosenman and Nielsen references have to be cited, correctly.

Page 11,bot:
“very” low – change to low. In same line: changed

Page 14:
3.para, line 5: Should it not be: greater than 1 % in the product?

Page 15:
Last para: write 168 C

“Exposures to its vapors are irritating to eyes, nose and mouth” – well, this depends on the actual threshold for sensory irritation, please modify.

For further support about the relevance of 2-butoxyethanol, the authors may consider that information now is available to conclude that concentrations above 2 ppm may result in sensory irritation in indoor environments (Wolkoff, 2008).

Page 16.
Line 2: NIOSH
2. para, 2. line: insert may, may promote

Page 18:
The authors may reconsider the relevance of the Wainman et al. (2001) paper, since the airway effects of ozone-limonene initiated ultrafine particles have been
reported, recently (Wolkoff et al., 2008).

Page 19:
Line 10: field studies

Table 2:
9 and 10: Ammonium hydroxide is the same as Ammonia
58: should be: tri butoxy…?

Table 3:
QUATs: benzalkonium chloride is a severe eye irritant

A number of RD50 values or citations (e.g. 2-BE) are missing. They are available from (Schaper, 1993; Nielsen et al., 2007).
In addition, RD50 should be defined and explained in text, if incorporated.

Reference List