

Interactive comment on “Global mercury emissions to the atmosphere from anthropogenic and natural sources” by N. Pirrone et al.

J. Pacyna (Referee)

jp@nilu.no

Received and published: 11 May 2010

I find the reviewed paper interesting with some additional information on sources and emissions which were somewhat omitted in the previous emission estimates. This applies particularly to the emissions from natural sources. We really need information on these emissions quite accurate and complete. It can be concluded that not much has been done so far in terms of researching the Hg fluxes from these sources. If the authors of the reviewed paper are right, the Hg emissions from natural sources and re-emission from aquatic and terrestrial surfaces are significantly higher than the Hg emissions from anthropogenic sources. The authors claim that as much as two thirds of the total emissions originate from natural sources and re-emission fields. This may have clear repercussions on the necessity of investing a lot of money and reduce

C2561

emissions from coal combustion and from other anthropogenic sources. The question could be again how important is to reduce Hg emissions from anthropogenic sources at the same as we do not have any handle of Hg emission from natural sources 2 times higher than the ones generated by various human activities. Indeed, much more data is needed for assessment of accurate and complete emissions from natural sources. But, I trust that the numbers for natural emissions and re-emissions in the reviewed paper have been properly assessed and therefore this paper is quite innovative. I recommend this work for publication.

Interactive comment on Atmos. Chem. Phys. Discuss., 10, 4719, 2010.

C2562