

Interactive comment on “Status of organochlorine pesticides in the drinking water well-field located in the Delhi region of the flood plains of river Yamuna” by P. K. Mutiyar et al.

P. K. Mutiyar et al.

mutiyar_pk@yahoo.co.in

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Dear Reviewer, Thanks for your comments on the paper and appreciation of our work. Please find our response to your observations about this article: 1. Only one sample from each well was taken for OCP analyses, which makes the data somewhat controversial. It was also said in the text that one sample was chosen for OCP analyses and choosing criteria was not mentioned. # One sample from each grid was taken to reduce the number of total samples. Grid size was 500 X 500 m. Only one type of crop was grown in a grid, thus uniform application of the pesticides was expected through the grid.

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2. The differences between two well types should be included in the manuscript. Location, depth, major process differences should be addressed in order to give a comparison chance to the reader. # The Location, depth and major process differences of both Ranney well and borewell has been included in the revised manuscript. The average depth of the Ranney wells (N=5) was 25.56 m while the average depth of the borewells (N=80) was 44.07 m, this has been included in the revised manuscript.

3. In Table 2 the MDL values were given as 0.01 ng/L for all investigated pesticides. This value is extremely low when it is compared with the other research studies which used GC-MS/MS with SPE sample pre-treatment method. For example in one article (Snyder, Shane A. , Wert, Eric C. , Rexing, David J. , Zegers, Ronald E. and Drury, Douglas D.(2006)'Ozone Oxidation of Endocrine Disruptors and Pharmaceuticals in Surface Water and Wastewater', Ozone: Science & Engineering, 28: 6, 445-460) the MDL for DDT was found to be 10 ng/L. Was the MDL value (0.01 ng/L) found by the researchers or the value was taken from another source or reference. Either way a better explanation should be given for this value. # Synder et al, 2006 used GC-MS/MS, and thus reported higher MDL. But, we used GC-ECD for quantification. MDL was developed with a S:N ratio of >10. With GC-ECD, for the chlorinated compounds, the MDL can go up to pg/L. So, our method provides detection at much lower levels.

4. The reasons for different OCP levels for each sampling site could be explained in more detail by giving the specifics about the sampling sites (location, soil properties, distance to the feeding water source-Yamuna River, etc.) # We have already mentioned that well-field is located in the flood plain and receives huge recharge by bank filtrate (Lorenzen et al, 2010). The soil type of the area has been given in the section 2.1 under description of the sampling site. However we have included the average distance of borewell from the feeding water source –Yamuna river in the revised manuscript.

Interactive comment on Drink. Water Eng. Sci. Discuss., 4, 85, 2011.

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