Reviewer's report

Title: Effects of Exposure to Polychlorinated Biphenyls (PCBs) and Chlorinated Pesticides on Serum Lipids in Residents of Anniston, Alabama

Version: 2 Date: 7 November 2013

Reviewer: mary turyk

Reviewer's report:

The paper has been much improved by the revisions.

I am suggesting two mandatory, but minor revisions.

For tables 3-7, please add in the footnotes the alpha level that was considered significant for the analyses presented in each table. I am confused by the bolding in the tables. For example the text referring to Table 4 on page 7 of the manuscript suggests that associations in this table were considered to be significant at alpha<0.0018, but p-values that are larger than this figure are bolded in the table. I suggest that a superscript next to the significant betas would be clearer than bolding.

Please check for inconsistencies between tables and text. For example, the following sentence is confusing to me because I also see a significant association of tri-tetra ortho congeners with triglycerides (p<0.0001) in model 2 Table 4.

"When adjusted for other POPs (model 2) only tri plus tetra ortho PCBs showed statistically significant positive correlations with total lipids and and total cholesterol".

It would be clearer if the association with triglycerides was also discussed. In addition, if the significance level for this table is 0.0018 (as I assume from the text) then the association with total cholesterol would not be significant (p=.0047).

There are other places in the results that are also confusing. Please double check the text in the results with the tables.

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: Yes, and I have assessed the statistics in my report.

Declaration of competing interests:

I declare that I have not competing interests