Reviewer's report

Title: Polychlorinated Biphenyl Exposure, Diabetes and Endogenous Hormones: A Cross-Sectional Study in Men Previously Employed at a Capacitor Manufacturing Plant

Version: 1 Date: 31 May 2012

Reviewer: David Carpenter

Reviewer's report:

Discretionary Revisions:

This is a carefully done study but not a very exciting report, in part because so many variables were monitored. There are two interesting positive subjects - PCBs and diabetes and PCBs and thyroid hormones. Many of the other results, especially relating to other hormones, are not significant. There is certainly value in negative data, but a briefer report (or reports) that focuses on positive results would be more interesting.

In the statistical analysis section it is not clear what the last sentence in the first paragraph refers to with regard to variables with a value below zero. You have already said that PCBs below the detection limit were treated as zero, and certainly neither serum glucose or lipics had values of zero. What are these variables?

This report certainly has some important observations that require further study, especially the lack of relationship between PCBs and insulin resistance in the presence of a strong relationship between PCB concentrations with diabetes. The use of T3 uptake is also a positive feature, as this is not commonly evaluated in thyroid studies.

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

I declare that i have no competing interests.