Reviewer's report

Title: A comparison of self reported air pollution problems and GIS-modelled levels of air pollution in people with and without chronic diseases

Version: 1 Date: 27 August 2007

Reviewer: Veronica Vieira

Reviewer's report:

General

Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)

1. In order to fully explore the association between self reported air pollution and GIS-modeled air pollution, the authors should repeat the statistical analysis using NO2 values as the outcome to observe the relationship between the variables and true air pollution.

2. More discussion of the correlation between APP and modeled NO2 is necessary.

3. The authors should provide a stronger argument for their claim of "over reporting air pollution problems" given that there is "strong association between self reported and GIS-modeled" air pollution.

Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

4. The word 'modeled' is repeated misspelled.

5. Table 1 needs a clearer description for the two columns of ORs.

6. Last sentence of paragraph 2 in Background is confusing and should be rephrased.

7. The use of the word 'susceptible' to report disease, etc. is awkward and should be replaced with another word, for example 'likely'.

8. The second-to-last sentence before the Study limitations section ("these associations were independent...") is confusing and should be rephrased.

Discretionary Revisions (which the author can choose to ignore)
**What next?:** Unable to decide on acceptance or rejection until the authors have responded to the major compulsory revisions

**Level of interest:** An article of limited interest

**Quality of written English:** Needs some language corrections before being published

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