MANUSCRIPT REVIEW BOARD INFORMATION SHEET

MANUSCRIPT TITLE: EFFECT OF CIGARETTE SMOKING ON RESIDENTIAL NO_2 LEVELS

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ABSTRACT

Two studies evaluating the levels and sources of nitrogen dioxide in approximately 90 employee homes in the Richmond area with continuous sampling during the weeks of August 5, 1980 and February 9, 1981 were performed using samplers in living room, bedroom, kitchen and outdoors. Additional data were collected concerning appliance usage, heating/cooling plant, ventilation and cigarette smoking. Results were analyzed using BMDP routines.

The largest contribution to NO_2 concentration was found to be gas kitchen appliances. The mean kitchen level for homes with gas appliances during the winter study was ~134 $\mu g/m^3$.

Excluding participants with gas kitchens, incremental influence due to cigarette smoking was detected. The seven-day, three-room average level of NO_2 in the homes of nonsmokers and smokers without gas appliances was 12 and 15 $\mu g/m^3$ in the summer, respectively. The corresponding winter values were 19 and 22 $\mu g/m^3$. Furthermore, the individual levels of NO_2 in the homes of smokers were generally below both the adjacent outdoor level and the National Ambient Air Quality Standard (NAAQS) limit for annual exposure.

PATENT STATUS: _____*Applied for* _____*Patented* X *Not Filed*

INTERNAL REFEREES: *M. R. B. COORDINATOR:*