Outdoor and Indoor Acrolein Measurements

Tom Dann, Daniel Wang Environment Canada - Ottawa

NESCAUM Monitoring and Assessment Committee Meeting May 7 & 8, 2008



Environment Environnement Canada Canada

Current Acrolein Levels in Canada – DNPH Method (2000 – 2006)



Indoor/Outdoor VOC Concentrations – Windsor, Ontario

Predicting Personal Exposure of Windsor, Ontario Residents to Volatile Organic Compounds using Indoor Measurements and Survey Data:

Corinne Stocco, Morgan MacNeill, Daniel Wang, Xiaohong Xu, Mireille Guay, Jeff Brook, Amanda J. Wheeler.

Atmospheric Environment – in press.

Indoor/Outdoor VOC Concentrations – Windsor, Ontario

48 non-smoking homes and nonoccupational exposures

- concurrent indoor, outdoor and personal exposure sampling
- winter and summer sampling campaigns
- 188 measured VOCs but only 18 reported in paper

Indoor/Outdoor VOC Concentrations - Windsor



Annual Indoor/Outdoor and Personal Exposure/Outdoor VOC Ratios (geometric means)

VOC	I/O	P/O
Acrolein	9.0	7.7
Benzene	2.1	2.1
1,3-Butadiene	2.1	2.4
Ethanol	170	153
Limonene	288	668

Personal Benzene Levels Categorized by Type of Garage

