

Risk Assessment for Criteria Pollutants and Air Toxics in two Sites of Mexico City During 2003 Field Campaign.

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An environmental risk assessment for criteria pollutants and air toxics in Mexico City is presented. The data used in the study were collected by FTIR and DOAS systems during the Mexico City Metropolitan Area field campaign on April 2003 (MCMA-2003). The systems were deployed in two different sites: One in downtown (Merced) and the other in the south east (CENICA). Concentrations of criteria pollutants and air toxics were obtained every 5 min and were used to obtain hourly average concentrations and the month average for April. The concentration values were used to estimate the risks of acute and chronic exposure to ambient concentrations using risk measures like hazard index, life cancer probability, life lost expectancy and maximum individual cancer risk. Results revealed that both sites have similar risk values. For acute exposure, criteria pollutants have larger risks than air toxics, but air toxics have larger risks for chronic exposure. Ambient concentrations of benzene showed the largest carcinogenic risk of the measured air toxics.