

APPRAISAL OF AIR QUALITY AFTER THE IMPLEMENTATION OF CNG AS FUEL IN PUBLIC TRANSPORT IN DELHI, INDIA

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Delhi is one of the most polluted cities in the world and vehicular exhaust forms a major fraction of these various pollutants. Therefore, public transport was amended to use Compressed Natural Gas (CNG) instead of diesel or petrol by the Supreme Court of India. After the implementation of CNG in Delhi since April 2001, Delhi has the higher fraction of CNG-run public vehicles in the world, which includes nearly 9,500 buses, 4,000 mini buses, 15,000 taxies and 45,000 three wheelers and most of them were introduced within 20 month after the implementation of CNG. In the present study, a preliminary investigation was made to assess the inorganic fraction, total suspended particulate (TSP), respirable fraction (PM₁₀); and organic fraction (benzene, toluene, xylene (BTX) and polycyclic aromatic hydrocarbons (PAHs) in ambient air of Delhi, after the implementation of CNG, in comparison to those before to the implementation of CNG. A decreasing trend was found for particles and PAHs, while the concentration of BTX shows no significant variation. Key words: CNG, public transport, PM₁₀, BTX, PAHs.