

ABSTRACT

This project was carried out to study the current condition of Urban Air Quality in Karachi metropolitan city. Karachi is one of the heavily populated megacities in the world, and is facing serious problems regarding air quality. The increasing air pollution has raised serious environmental and health concerns in the city.

Air quality is one of top priorities for a sustainable urban built environment. Traffic and industrial emissions are found to be the two major contributors to air pollution in urban areas. Air pollution is caused by the contaminant gases and particulate matters like carbon dioxide (CO₂), carbon monoxide (CO), sulphur dioxide(SO₂), oxides of nitrogen(NO₂) , ozone(O₃) ,and particulate matters(PM₁₋₁₀).

This project was focused on investigating, analysing and assessment of urban air quality parameters. The air quality parameter includes concentration of criteria pollutants in the air. Data about pollutant levels were measured using advanced air pollutant measuring devices. The data were collected during the peak hour of working day.

The trends of air pollutant concentration were studied. Three separate locations of different land uses i.e. commercial area, domestic area, industrial area, were selected for investigation of air pollutant levels in the city. The selected locations were Korangi Town (Industrial Area), Saddar Town (commercial area) and Gulberg Town (residential area).