

Air pollution from fossil fuel use in the industrial sector in the city of Lima, Peru

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The air of Lima Metropolitan Area is among the most polluted in Latin America. Furthermore, the damage caused by vehicles, it is important to consider the presence of the largest industrial park in the country, located in industrial areas of Lima East, Lima South, Lima City, Lima North and Callao. The main energy source used in this area is the residual oil (MITINCI-Peru, 2000). However, in recent years, coal and other fuels such as firewood have gained presence in the market mainly due to the volatility of rising prices of oil products.

Air emissions from industrial combustion processes are highly harmful to human health and are responsible for alterations of the natural system. Hence, this research work evaluates their possible effects on air quality in our city by recording solid carbonaceous material, a characteristic of industrial combustion processes.

The results of the research show the highest concentration pollutant areas from the use of fossil fuel and spatial distribution of such pollution. Similarly, these results allow the development of a potential tool for controlling and monitoring the processes of air pollution by using these fuels.