

TRENDS OF AIR POLLUTION IN THE LARGEST INDUSTRIAL AREA IN SRI LANKA

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Abstract

Urbanization and industrialization are the main causes of air pollution. However, in Sri Lanka, most activities on air quality monitoring and management are concentrated in Colombo, which is the commercial capital of Sri Lanka. Few attempts were taken to study air pollution activities in industrial areas. Therefore, this attempt has been made to discuss the air quality levels at Sapugaskanda, a residential area that developed later in to an industrial area. The only petroleum refinery in Sri Lanka is situated at Sapugaskanda. In addition, three thermal power plants of capacities 150, 60 and 40 MW that use furnace oil, and several industries are situated within the area. Therefore, this is presently considered as the biggest industrial area in Sri Lanka.

Spatial variation of air quality levels in Sapugaskanda area shows that there is more pollution in the North – East direction than other direction. Heiyantuduwa area is found to be the most polluted area in comparison. Temporal variations of air quality at two locations Manelwatta and Gonawela from 1997 to 2004 reveals that the air pollution levels in both locations are on the increase. This increasing trend of air pollution may be common to other areas as well. However, data in other areas are insufficient to arrive at a conclusion. When compared with Colombo, Sapugaskanda is less polluted with respect to air pollution.