Overview on Particulate Matter Emissions at Construction Site: Story in Malaysia

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Abstract

Deterioration of air quality especially in Malaysia has now become an issue in the global environment. The increase of construction projects in Malaysia is due to the growth of population, and rapid urbanization is the main factor contributing to the highest industrial air pollution sources by the state from the year 2010 to 2015. One of the pollutants involved in the cause of air pollution especially in Malaysia is from particulate matter (PM) emission. The emission of PM in Malaysia comes from three primary sources, which are mobile, stationary, and open burning sources. In the year 2000-2015, the estimated percentage of annual PM emission accumulated in Malaysia is 7% for every year of air pollution sources. Consequently, this distribution of PM in the atmosphere produced by human activities can cause serious problems such as radiation balance of the Earth, change in the cloud formation, contribution to global warming, reduced visibility, and worst affect the human health, especially the construction workers and public due to the inhalation of small particles that induces an inflammatory reaction in the airways and subsequent induction of systemic inflammation and coagulation disturbances.

Author keywords

Air pollution; Construction; Particulate matter; Particulate pollution

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