

Source, Dispersal and Impacts of Airborne Pollutants: A Case Study of Mangalpur Industrial Complex, Raniganj

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ABSTRACT The consequences of Industrialization and its pollution are increasing day by day causing impact on human health. Particulate matter and gaseous emission from industries are responsible for rising discomfort, increasing airway diseases, decreasing productivity and causing deterioration of environment. The present study is carried out in Mangalpur industrial estate, Raniganj invaded by a number of sponge iron industries in recent years. Major pollutants from these industries include SPM, RPM (PM_{10}), SO_2 , NO_x and solid waste. Using remote sensing and GIS technique the pollution zone has been identified and health data has been collected accordingly. Wind direction and velocity are also taken into consideration to understand the dispersal pattern of the pollutants. The results depict a clear correlation between health problems and level of pollutants. Various health problems like intestinal, skin, respiratory have been categorised. Eventually, spatial distribution of pollutants and the worse affected villages have also been identified, considering that some remedial measure had been suggested.