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## ENVIRONMENTAL IMPACTS ARISING FROM THE COMBUSTION OF FIRECRACKERS IN KUTTY JAPAN, SIVAKASI, INDIA

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### Abstract

Current engineering practices that affect both humans and the environment tend to be guided, developed, and controlled by environmental factors. The industrialised process used in the fireworks sector involves labour-intensive biochemical management. Therefore, it is determined that the fireworks industry is quite risky. The goal of this study is to examine the health and environmental risks caused by the fireworks industry in Sivakasi (Tamil Nadu). The purpose of the paper is to evaluate the health and environmental impacts caused by firecrackers. During the Diwali celebration, the burning of numerous fireworks releases. Pollutants from the atmosphere (SO<sub>2</sub>, NO<sub>2</sub>, BC, PM<sub>10</sub>, surface O<sub>3</sub>, CO) released during the diwali have a significant impact on weather conditions like relative humidity, air temperature, visibility, and lapse rate in the atmosphere over India, particularly around the land-ocean boundary. In this research work, various hazards are considered the main factors in various views based on workers and industrial experts from various levels of management. Acceptable safety hazards during evaluation are very vital for monitoring the risks in industries for the welfare of workers. The variation in the lapse frequency during the celebration days causes changes in the vertical distribution of temperatures and the diurnal trend in relative humidity. Thus, during this celebration, the air pollutants over the urban area have a substantial impact on the outermost layer of meteorology, which has implications for environmental and health risks in Sivakasi.

*Key words:* environmental impact, firecrackers, fireworks, health afflictions, pollutions

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