

**AN ASSESSMENT OF HEALTH HAZARDS OF OPEN DUMP OF SOLID WASTE  
IN THE COLOMBO MUNICIPAL COUNCIL AREA**

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**Abstract:** Colombo Municipal Council (CMC) disposes an average of 800 MT/day. Generally, the practice of disposing solid waste is open dumping and burning, which creates multifarious health issues to the dwellers of CMC area. Prime objective of this study is to evaluate the health hazards of open dump of solid waste in the Colombo Municipal Council area. An area of 7,069m<sup>2</sup> around the Colombo dumpsite was incorporated for this study, selecting 378 samples randomly from 15,400 households. Majorly, 23 types of health issues were identified from all three rings. Accordingly, the first ring (0-500 m) shows 54.0% of health issues and second (500-1000m) and third (1000-1500 m) rings recorded 32.4% and 13.6% respectively. Therefore, the p-value becomes significant (1.40562E-10). This study found that the nature, effects, size and volume of issues are varied; according to the distance, direction and location of the residences from the dumpsites and has a negative relationship between health issues and distance. Accordingly, this study recommends implementing an integrated system to manage the solid waste in its territory, consolidating all stakeholders into a single administrative point.

**Keywords:** Open disposal, health issues, environmental terrorism, integrated management system

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