SOLID WASTE DISPOSAL PRACTICES AND REVIEW OF ENVIRONMENTAL IMPACTS A CASE STUDY OF DUMPING SITE

BASAVARAJ PARUTI[1], B SANTHAVEERANAGOUD[2] & HEMALATHA K[3]

[1]Research Scholar, Department of Civil Engineering, Bangalore University, Bangalore, Karnataka, India

[2]Professor, Department of Civil Engineering, Bangalore University, Bangalore, Karnataka, India

[3]Environmental Engineer, BBMP, Bangalore, Karnataka, India

ABSTRACT

Municipal solid waste is a problem in most cities due to rapid urbanization, unplanned growth, nil segregation at source and unorganized collection of waste. The existing landfills are getting filled, sites for new landfill are hard to get, per capita waste production is increasing and the cost of waste collection etc. is increasing. Municipal waste arises from Residential, Commercial, Institutional and Industrial sources. It is composed of paper, plastics, glass, cloth, metals, organic waste and ashes etc.

Inappropriate solid waste disposal is a major threat to the environments of developing countries since most of the solid waste generated in developing countries end up directly in open dumps which are uncontrolled and overloaded. Air pollution from landfill emissions, ground water pollution from leachates, health problems due to breeding of disease causing pests and social problems such as decreasing land values and aesthetic appeal of an area etc. are some associated problems.

This paper presents a review of current practice of solid waste disposal of Bangalore Mahanagar palika. A case study of one of the solid waste dumping site in Mavallipur village, Bangalore Urban Distrct, India, has been conducted by interaction with BBMP officials, householders of village, and NGO of ESG were interviewed to examine current practices and related environmental problems. The overall environmental impacts associated with current practice of waste disposal in Mavallipur dumping site is presented in this paper.

KEYWORDS: Solid Waste Management (SWM), Waste Management Planning, Geographical Information System (GIS)