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On the Physical Composition of Solid Wastes in Selected Dumpsites of Ogbomosoland, South-Western Nigeria

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Author(s)

Samson Ojoawo, Oluwole Agbede, Abimbola Sangodoyin

ABSTRACT

Solid wastes have varied compositions and constituents from place to place. The study area is not an exception. The entire 5 Local Government Area (LGA)s of Ogbomosoland were surveyed and about 40 major dumpsites were identified across the spread. Twenty-five (25) of these were selected, five (5) each per LGA, for the study. The wastes were collected from the dumps, sorted, weighed and classified according to their constituents. The densities of wastes from the 25 dumpsites were also determined. The overall average composition using the main classes of wastes were found to be food; 68.4%, metals; 7.2%, textile; 4.6%, papers; 4.4%, plastic; 3.9%, glass; 3.6%, wood; 3.1%, and miscellaneous; 4.8%. The average waste density for the study area was 438.1 kg/m³. Putrescible materials dominated the waste composition of the study area. The components of wastes in the city revealed a higher standard of living when compared with those of the residents in the environs. Rural residents generate denser wastes when compared with the urban centres and as such are prone to leachate pollution emanating from these organic wastes. The ingress of leachate is a threat to the groundwater resources of the study area.

KEYWORDS

Solid Wastes, Leachate, Pollution, Ogbomosoland

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