

عنوان مقاله:

Physico-chemical characteristics of solid waste for treatment options: a case study of Kumasi, Ghana

محل انتشار:

ماهنامه سلامت، ایمنی و محیط زیست، دوره 1، شماره 6 (سال: 1392)

تعداد صفحات اصل مقاله: 10

نویسندگان:

.e.o Agyemang - *Corresponding author; Energy Systems Engineering Department, Koforidua Polytechnic, Ghana*

.a.a mensah - *Ghana National Gas Company Limited, PMB, Accra, Ghana*

.e awuah - *Civil Engineering Department, Kwame Nkrumah University of Science and Technology, Kumasi, Ghana*

s.o kwarteng - *Civil Engineering Department, Kwame Nkrumah University of Science and Technology, Kumasi, Ghana*

خلاصه مقاله:

The study aimed at determining the physical and chemical characteristics of solid waste generated in Kumasi for treatment and disposal options. Ninety households were conveniently selected comprising all the three categories of income levels in the metropolis. Solid wastes generated from these households were separated into its components with the weight and volume of each component measured. Subsequently sub-samples from the composite samples were then taken to the laboratory for the chemical analysis. An estimated amount of 1227 tons of domestic solid waste is generated daily based on the city's current population. The study revealed that about 61% and 15% of the daily waste generated could be treated using composting or anaerobic digestion method and reuse or recycling method respectively, thus diverting a chunk of the waste from going to the landfill and subsequently increasing the lifespan of the only landfill in the city

کلمات کلیدی:

Waste/Calorific value/Anaerobic/Composting/Chemical

لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/645106>

