

*Editorial***A detail note on solid waste management****Nekesa Karanja***

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DESCRIPTION

Solid waste management is the transport, collection, recycling, monitoring of solid waste materials, disposal, or processing. The aim of solid waste management is to reduce the volume of waste requiring disposal, maximize the collection efficiency of waste, maximize the economic value of waste, minimize waste generation and develop, adopt disposal methods and environmentally sound treatment. A waste management system should normally consist of environmentally acceptable waste management practices that are aimed towards minimizing waste generation from both domestic and industrial/commercial activities. Further, the system must provide for the protection of human health and therefore the environment also.

Hierarchy of waste minimization also known as waste prevention this means avoiding the potential for waste generation in the first place. It is usually linked with the manufacturing industry, and is synonymous with reductions in resource use, resources selective, avoiding certain types of resources, especially hazardous wastes. Waste minimization strategies include all actions to scale back the number of waste requiring disposal. Waste minimization includes reducing waste at source, reusing materials, recycling waste materials, reducing the use of toxic or harmful materials. Waste minimizations have the following advantages, reduced volume of waste for disposal, reduced costs of collection disposal, longer life of disposal sites, reduced environmental, reduced health impacts and reduced costs through more efficient use of resources. Waste Re-Use refers to the re-use of discarded items without any additional processing. Recycling involves the utilization of discarded material to produce another product of the same grade or lower.

Resource recovery through waste processing is often that the biological or thermal treatment of waste may result in recovery of useful products like compost or energy. Biological process or treatment involves using micro-organisms to decompose the biodegradable components of waste. Two sorts of processes are used, namely, Aerobic processes, including windrow (row of drying grass) composting, aerated static pile composting, and in-vessel composting, etc. Anaerobic processes include combined processes, high solids anaerobic digestion (dry process), and low-solids anaerobic digestion (wet process).

Thermal treatment or Thermal Processes involve the conversion of gaseous, liquid from waste, and solid conversion products with the subsequent or concurrent release of energy. Three sorts of systems are often adopted, namely combustion systems (Incinerators), pyrolysis systems, gasification systems. The final functional element within the solid waste management system is waste disposal. Today the disposal of wastes is done by uncontrolled dumping. (Open dump) and landfilling. Open dumping is defined as a land disposal site at which solid wastes are disposed of in a manner that doesn't protect the environment, are vulnerable to open burning, surface and spring water contamination, detrimental to the natural great thing about the land, deteriorating soil quality and are exposed to scavengers. Open dump in developing countries is a predominant method of waste disposal leading to Illegal dumping problems, Groundwater contamination, Air pollution, Pest, and Health hazards. Engineered Landfill sites also as properly sited and constructed dumpsites are a pivotal component during a sound waste management system. It is important to notice that despite active waste prevention and recycling, residues will always remain to require final disposal.

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Waste should therefore be disposed of in such a way as to not cause harm to the environment and mankind. The waste management program's success will depend to a greater extent on awareness programs. The awareness programs will provide for the sensitization of communities on the prevailing

environmental laws and by-laws. Safety, health classification, and handling are potentially hazardous. A public health officer should be included on the team to oversee safety aspects and health.