RESEARCH REVIEW JOURNALS
ICIMP-2018
SEP- 2018
Special Issue

ISSN: 2455-3085 (Online)
RESEARCH REVIEW International Journal of Multidisciplinary
www.rrjournals.com [UGC Listed Journal]

Innovation in Waste Management -Recycle, Reuse and Reduce

Dr. K.R.Sakthidevi

Assistant Professor PG & Research Department of Commerce (CS) Vellalar College for Women (Autonomous), Thindal (India)

ARTICLE DETAILS

Article History
Published Online: 03 Oct 2018

Keywords
Waste management

***Corresponding Author**
Email: sakthivcw[at]gmail.com

ABSTRACT

The objectives of this paper is to study the current position of waste management. Waste management is very important for our environment. Our earth is spoiling with a lot of waste. We have to control our waste and save environment for future generations. This paper is based on secondary research. This research helps to know the knowledge about the various types of waste management and its innovation techniques for how to reduce waste and how to manage our waste in an effective manner. This study will help to know about the state of waste and how to manage waste. This paper attempts to understand the important role to be engaged in waste management in our country.

1. Introduction

Waste management means collecting, transporting, processing, recycling and monitoring of the waste materials. The term waste management generally relates to those materials which are produced by human activity and is usually undertaken to reduce the effect of these activities on their health and environment. Waste management is also useful to recover useful resources from the waste. Waste management involves all solid, liquid and gaseous or radioactive substances which are managed with different methods and expertise is required for each of them. Waste management practices are different for different countries of the world be it developed or developing nations. The management is different for urban and rural areas, for residential and industrial waste producers. Management of residential and institutional waste in cities and metros is done by the local government authorities or what we call as Municipal Corporation, while management of non-hazardous commercial and industrial waste is done by the generator of such waste.

2. Types of waste Management

Generally, waste could be liquid or solid waste. Both of them could be hazardous. Liquid and solid waste types can also be grouped into organic, re-usable and recyclable waste.

1.Liquid Waste

Waste can come in non-solid form. Some solid waste can also be converted to a liquid waste form for disposal. It includes point source and non-point source discharges such as storm water and wastewater. Examples of liquid waste include wash water from homes, liquids used for cleaning in industries and waste detergents.

2.Solid Waste

Solid waste predominantly, is any garbage, refuse or rubbish that we make in our homes and other places. These include old car tires, old newspapers, broken furniture and even food waste. They may include any waste that is non-liquid.

3.Hazardous Waste

Hazardous or harmful waste are those that potentially threaten public health or the environment. Such waste could be **inflammable** *(can easily catch fire),* **reactive** *(can easily explode),* **corrosive** *(can easily eat through metal) or* **toxic** *(poisonous to human and animals)*. In many countries, it is required by law to involve the appropriate authority to supervise the disposal of such hazardous waste. Examples include fire extinguishers, old propane tanks, pesticides, mercury-containing equipment (e.g, thermostats) and lamps (e.g. fluorescent bulbs) and batteries.

4.Organic Waste

Organic waste comes from plants or animals sources. Commonly, they include food waste, fruit and vegetable peels, flower trimmings and even dog poop can be classified as organic waste. They are biodegradable (this means they are easily broken down by other organisms over time and turned into manure). Many people turn their organic waste into compost and use them in their gardens.

5.Recycle Waste

Recycling is processing used materials (waste) into new, useful products. This is done to reduce the use of raw materials that would have been used. Waste that can be potentially recycled is termed "Recyclable waste". Aluminum products (like soda, milk and tomato cans), Plastics (grocery shopping bags, plastic bottles), Glass products (like wine and beer bottles, broken glass), Paper products (used envelopes, newspapers and magazines, cardboard boxes) can be recycled and fall into this category.

3. Waste Management Resources

- Methods for dumping off waste
- Landfill: this method involves burying off the waste and this is the most common practice for the disposal of waste around the Globe
- Incineration
- Methods for recycling
- Biological reprocessing
- Recovery of Energy
- Reduction and Avoidance Methods

- Waste handling and transportation

4. Important of Waste Management

1.Environmentally friendly:

a. Correct ways of waste management especially industrial waste can keep our environment from pollution.
b. Example: i. Heavy metal such as mercury which can harm to our ecosystem. Proper disposal required.
ii. Nuclear waste to prevent radiation to our natural environment.

2. Waste causes resource depletion:

This is due to the common buying pattern: buy, throw, and then buy again. As the waste piles up high, the demand for more products also rises, almost exhausting the natural resources. This has a spiral effect, mainly involving threats to biodiversity, deforestation, pollution, and other environmental problems.

3.Recycling process:

Waste management is the collection, transport, processing, recycling or disposal, and monitoring of waste materials. The term usually relates to materials produced by human activity, and is generally undertaken to reduce their effect on health, the environment or aesthetics. Waste management is also carried out to recover resources from it. Waste management can involve solid, liquid, gaseous or radioactive substances, with different methods and fields of expertise for each.

5. Innovative tips to control waste

1. Consume less
2. Seperate our garbage bin like gradable and non-gradable waste
3. Compost our organic waste and start a vermiculture bin
4. Stop burning garbage

6. Conclusion

To prevent any epidemic and to make each city a healthy city-economically and environmentally, there is an urgent need for a well-defined strategic waste management plan and a strong implementation of the same in India. To achieve financial sustainability, socio-economic and environmental goals in the field of waste management, there is a need to systematically analyze the strengths and weaknesses of the community as well as the municipal corporation, based on which an effective waste management system can be evolved with the participation of various stakeholders in India. The public apathy can be altered by awareness building campaigns and educational measures.