

## ***Segmented Solid Wastes Management***

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This particular subject throws light on the types of wastes, quantity, quality and characteristics of solid wastes, the general flow of solid waste management as source, storage, collection, transfer station, treatment and disposal. The same deals in detail the centralized waste management across the globe and which proved inefficient for many of the factors as deprived collection efficiency, the prolonged time needed for treatment and natural stabilization in the disposal sites. It is also to be seen that the management is not sequential as planned and takes a mess up in between by overlapping and intrusion of processes that the effects will be much pronounced on the negative side than the initial stage. The reason for the same is that there is no responsibility of the stake holders to handle the waste effectively and every one by the inherent trait feel relieved if the waste goes out of their sight and the responsibility of them is over by then. They still have the **NOT IN MY BACK YARD** syndrome in spite of crores of money spent for the effectiveness of the programme and to create awareness. Engineering has taken up a third dimensional view where every problem of real life situations has a simple engineering intervention. It is to be accepted for the fame and name, celebrity status and significance, the simple task is made complex for the engineering interventions in the recent decades with globalization and which need to be checked. Engineering interventions must be to exploit the natural resources in a much effective way that the progress will be beneficial to all involved and there should not be haste or drag, but an optimum solution to meet the real time situation. The simple solution will be in priority among number of solutions including the complex one if the purpose of solving is focused only on the target group, and that makes the life simple where the progression will be multifold for the advancement in technology and humanity. Every engineering intervention must be justifying on the user side without taxing them much to avail the facility by any way. This provides progression and prosperity to mindful activities rather than hard work. When simplicity is given focus than simplistic attitude in governance, every suggestion and feed back of user holds a value that the system is to evolutionary progress without much hesitation.

## HOLISTIC APPROACH ON THE SOLID WASTE MANAGEMENT

It is not possible to quantify, qualify and characterize the wastes to suit the management strategy as every individual within a house itself will be generating different types of wastes at different times which can never be generalized and is the core of failures in waste management strategy. All products, resources, and the part of ecosystem are biodegradable and nothing in the universe is inorganic purely and we classify all these times as inert, inorganic from the organic fraction when we find their decaying ability is infinite with respect to the life time.

When we consider all wastes as organic and the core of the elemental part of all creations on the earth is carbon, the solution to the waste management is much simple. We know the nutrient value in the natural resources as organic are carbon, nitrogen, hydrogen, and oxygen basically and several other elements which are evolving all these years and continue to evolve with the reactivity of these basic elements with natural components for millions of years together and which will be complex and needn't be discussed here.

All these basic elements, form different combinations to give the essential nutrients of body building as carbohydrates, fats, vitamins, proteins and minerals. Thus all the body building elements as food and the waste those appear from them all contain only these basic organic forms and are to be handled in view of the same.

The simple strategy put forth to handle the solid wastes are simply to burn them, to make them all into ashes as carbon source to soil as the ash thus formed are humus which is porous and rich in carbon content, the water retaining capacity is extremely good to 95% by weight which promotes plant growth.

The carbon nitrogen requirement for plant growth is 20 to 30 parts of carbon to one part of nitrogen. The carbon will be taken up more easily by oxidation and get stabilized by contributing to agricultural growth. The disadvantages pertaining to burning the wastes are eliminated by decentralizing the burning activity to each amenity on their own as DO IT YOURSELF that there will be pacing which takes care of the dispersion of the smoke arising out of burning.

The uptake of carbon by natural elements as sun, water, soil and air with their interaction promotes progressive environment, the human health will be protected by having the incineration unit compact to have a filter and leave the smoke at a height more than 3 meters from the ground level for easy dispersion. The water acts as a carbon sink and absorbs heat too by heat transfer.

The soil is enriched with nutrient value promoting plant growth and retains water that the plants take in more carbon di oxide from the atmosphere and give out oxygen to help perfect saturation of oxygen. This needs an integrated approach of growing plants to any form as potted plants in flats, kitchen garden and more such indoor and roof plants that it adds to eco psychology which promotes a comfortable pleasing environment and a hobby for the residents apart from acting as carbon absorbers.

When we get into decentralized incineration at every amenity, the time of burning will be different and will not add to accumulation of pollutant. As seen ever, the carbon emitted into the atmosphere is not at all a pollutant, but readily available source as building element to all living beings and energy source which need to be realized and utilized. This gives a reversal of thought that carbon emission should not be restricted but effectively utilized to maintain a balance and promote a healthy environment.

All types of wastes as organic, inorganic, combustible, non combustible be burnt simply when it enters into waste stream as the same cannot be reused as scrap. Even the metal at repeated high temperature melts and converted to slag that it will not do harm. When decentralization is done, the handling of the waste becomes the responsibility of citizens that there will be mindful use of resources and hence reduction in the volume of wastes.

Most of the problems of environment will get solved if the same is viewed as connectivity between the interactions of natural components which will then become an opportunity. The bottom line is that the environmental issues are not threat but evolution of natural cycles which need to be understood for effective use.

Unlike the integration forced from other strategies, this will make the integration happen on its own and we shall see the carbon cycle dissolves the transition zone thin and the flux of carbon to various other forms happen more readily that we bring back the serenity of nature progressively.

This strategy effectively handles the vehicular emission too as the warm air at the ground level will find a small height of dispersion as the surrounding air gets heated up much easily due to fragmentation in the urban atmosphere as there is break in the continuity of atmospheric layers. When solid wastes are burnt at higher levels they simply form a transition zone that the dilution will be much more in the higher regions lifting the plumes of vehicular emission much higher and their dilution is easier too nullifying the temperature inversion and hence the dispersion taken to higher altitudes and it is to be noted that among all other components the space is unlimited and can serve most of the requirements for progressive development which is the third dimensional approach.

When we set to use the virtual space for communication we can effectively balance the carbon count and it is to be noted that no evolutionary changes need to be stopped, but made use of with a slight diversion, alteration which is natural and innovative.

**Restrictive and instructional way of living too is not advisable, that instead of don'ts, we shall practice do's.**

## **THREADS**

1. The solid waste generation in a residence depends on the lifestyle and food habits. Discuss the solid wastes generated in your house and how you could minimize the generation.

2. The raw food diet helps a mega living. The outcome of the same is increased energy, complexion, concentration, creativity, skin tone, vitality, alertness, mental agility, memory benefits, and sense of harmony with nature, health, and longevity, less sleep requirements, obesity, and body fat, digestive difficulties. Enumerate a food plan for your family.

3. How will you reduce the volume of solid waste generated in your house?
4. Give the flow chart of conventional solid waste management? Discuss the advantages and disadvantages of each stage of the solid waste management.
5. Discuss the problems associated with storage and collection phases of solid waste management.
6. What do you understand by the transfer station? How do you feel the activities at transfer station are eliminated?
7. What are the various treatment methods suggested for solid waste management? Discuss the advantages and disadvantages of each of the methods?
8. What are the disposal methods available as the final phase of solid wastes management?
9. The solid wastes management is now becoming the serious issue for the lack of labor and which will become still crucial in the years to come. Discuss on this.
10. What do you feel about the segmented solid waste management discussed above?
11. What is the ratio of organic components, carbon, nitrogen, hydrogen and oxygen in air, water, soil?
12. How do you perceive the energy from the sun sets momentum to balancing carbon in the above natural components?
13. Mere incineration at the roof top encourages effective volume reduction irrespective of the type of wastes including hospital waste. Discuss on this.
14. What do you know about radioactivity, nuclear reaction? Radioactive and nuclear wastes are harmful and lead to diseases that the same need to be banned. Discuss on this.

15. The warm smoke gets dispersed in the atmosphere more readily as long as the temperature of the surrounding air is cooler than smoke. This promotes solid waste management even in apartments and tall buildings.

16. The food wastes in the hotels and restaurants could be minimized if the concept of serving food is changed to pay for what you take. How can you bring in this activity practically?

17. How will you justify the statements “Eating to live, living to eat”, “buying to live, living to buy”, in view of consumerism.

18. Discuss your views that will further thinking in progressive solid waste management.

19. Packing material adds to solid wastes which can be made to compromise with quality products. Discuss how this can be achieved?

20. The use and throw concepts have ascended to use and throw quality products even for the frequent upgrading and newer versions which promote corruption that in turn facilitates the resources being wasted before their life time ceases and make the value of money questionable. Discuss on how to manage this situation.

21. Dry atmospheric air roughly contains 78.09% of nitrogen, 20.95% oxygen, 0.93% argon, 0.039 carbon di oxide. How do you interpolate this with the atmospheric dispersion of smoke?

Everything is possible, impossibility is where you stop the efforts, and there is no literal end for anything.

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