

Materials which are discharged to, deposited in, or emitted to an environment in such amount or manner that cause a harmful change are termed as waste. Waste includes all such items that people no longer require or are not of any use for, which they want to discard.

Waste management is the series of processes, generation, prevention, characterisation, monitoring, treatment, handling, reuse and residual deposition of waste.

## Solid Waste Management

The waste material which is in any discarded form like garbage, refuse, sludge, treatment plant or any other pollution control facility is referred to as solid waste.

Any material including solid, liquid, semi-solid or gaseous material coming from industrial, commercial, mining and agricultural operations and community activities is part of solid waste. It does not include dissolved material in domestic sewage, irrigation return flows and industrial discharges.

The per capita waste generation in an Indian city is between 200 grams to 600 grams per day. Every year 43 million tonnes is collected but only 11.9 million tonnes went treating rest goes to landfills, which means only 27-28% of the waste collection go to treating which is a dire situation.

### Solid waste management rules, 2016

1. Scientific disposal of solid waste is important and the responsibility for the construction of infrastructure, transportation, the processing is with local authorities.
2. Rules are now applicable beyond municipal areas and extend to towns, notified industrial zone, areas under the airport, port and harbour, special economic zone, state and central organisation, religious places etc.
3. Recovery, reuse and recycle, this process should be in order and segregation at the source itself is necessary to channelize.
4. No person should throw, bury or burn the solid waste in public places or water bodies.
5. Integration of kabadiwalas, waste pickers etc to organize channel by the state government or any other group.
6. Composting method needs a promotion. According to rules, biodegradable waste should be treated and disposed of by this method and residual should be given to generators.
7. Technical guidance and capacity building to local bodies would be strengthened to meet standards and timelines set by the ministry of urban development.
8. Proper use of compost made by treating solid waste is necessary so that this method will grow with time.
9. Market operation and agricultural method need the right way to approach. Ministry of agriculture and the ministry of chemicals would be the implementing body.
10. Waste to energy is another concept given by the ministry of power. They would fix tariff or charges for the power generated by waste. All industries near (100 km) to waste treatment plant should replace 5 % of fuel requirement to energy by waste.

