

Waste management

Plastic Pavor Block & Sewage Treatment

Waste management (or **waste disposal**) includes the processes and actions required to manage **waste** from its inception to its final disposal.^[1] This includes the **collection**, transport, treatment and disposal of waste, together with monitoring and regulation of the waste management process and waste-related **laws**, technologies, economic mechanisms.

Plastic Pavor Block

A paving stone or brick made in any desired shape that can be used for pavements, building bricks or other purposes. these 'eco-friendly' paving bricks are cheaper than the classic model. Paving stones can be manufactured from waste plastics without requiring significant capital investment. The main component of the mixture can be made from plastic packaging (like bags and transparent films) and it is possible to mix other types of plastic waste in. The process is simple, melting the plastics down and mixing with sand. This mixture can then be moulded into any desired shape to produce paving tiles (such as for pavements)

01) There are several steps to production. Here we are two methods of production of Plastic Pavor Blocks.

02) The plastic serves to bind the materials together.

03) The plastic is then melted in a vat over a wood fire. Now we can pour the melted liquid plastic in any desired shape that can be used for pavements.

04) In the other method add Sand and Gum and mix it.

05) Then, you pour the mix into a mould and let it dry for 15 minutes.

06) This Paving Block is much stronger than the first one.

Plastic Pavor Block plant we will collect waste plastic from cities villages and other surrounding we will have to cut it in a shredder machine and then the mixture of sand and plastic in the proportion of 50-50 will be melted at the temp 100 degree celcius the hot mixture will be moulded into any desired shape to produce paving tiles.

The pavor blocks made from plastic and sand will be light weight and much stronger as concrete pavor blocks

The cost of our project will be in the average of 2crores – 5crores for that we will need 15 acres of land which we wil have purchase or borrow a government land on lease. The land should be near by a city of near about 1lakh to 5lakh population.

In our project we will raise maximum employment as possible as we can since we are minimizing the use of machinery we can provide employment to 500 to 1000 people in which we will place 70% of job for women which will help in Women empowerment. The result will be that the labours will be economically strong and will stop roaming for employment.

Burning plastic and other wastes releases dangerous substances such as heavy metals, persistent organic pollutants (POP), and other toxic chemicals into the air and persist in ash waste residues. Most plastics are made from fossil fuels like oil and natural gas, which release toxic emissions when extracted

from our earth. Oil and gas drilling releases enormous amounts of contaminants into the air, including benzene, toluene, carbon monoxide, hydrogen sulfide, sulfur dioxide,. These chemicals have been linked to the development of asthma, endocrine disruption and cancer.

A hospital of minimum 50 beds and all the services related to the diseases asthma, endocrine disruption and cancer is to be built in the factory area for the employees.

To reduce this pollution we will first grow maximum of Neem trees,Banyan trees,Peepal trees etc in the factory surrounding. which can inhale toxic chemicals from air and release fresh Oxygen.

We will collect the plastic from every where i.e cities,villages,rives,lakes,ponds by which the micro organisms,animals,birds will survive everywhere.

Sewage Treatment

Sewage treatment is the process of removing **contaminants** from municipal **wastewater**, containing mainly household **sewage** plus some **industrial wastewater**. Physical, chemical, and biological processes are used to remove contaminants and produce treated wastewater (or treated **effluent**) that is safe enough for release into the environment. A by-product of sewage treatment is a semisolid

waste or slurry, called **sewage sludge**. The sludge has to undergo further **treatment** before being suitable for disposal or application to land.

The term "sewage treatment plant" (or "sewage treatment works" in some countries) is nowadays often replaced with the term **wastewater treatment plant** or wastewater treatment station.^[2]

- **Primary treatment** consists of temporarily holding the sewage in a quiescent basin or collector where heavy solids can settle to the bottom while oil, grease and lighter solids float to the surface. The settled and floating materials are removed and the remaining liquid may be discharged or subjected to secondary treatment. Some sewage treatment plants that are connected to a combined sewer system have a bypass arrangement after the primary treatment unit. This means that during very heavy rainfall events, the secondary and tertiary treatment systems can be bypassed to protect them from hydraulic overloading, and the mixture of sewage and stormwater only receives primary treatment.

- **Secondary treatment** removes dissolved and suspended biological matter. Secondary treatment is typically performed by **indigenous**, water-borne micro-organisms in a managed habitat. Secondary treatment may require a separation process to remove the micro-organisms from the treated water prior to discharge or tertiary treatment.

- **Tertiary treatment** is sometimes defined as anything more than primary and secondary treatment in order to allow ejection into a highly sensitive or fragile ecosystem (estuaries, low-flow rivers, coral reefs,...). Treated water is sometimes disinfected chemically or physically (for example, by lagoons and **microfiltration**) prior to discharge into a **stream**, **river**, **bay**, **lagoon** or **wetland**, or it can be used for the **irrigation** of a golf course, green way or park. If it is sufficiently clean, it can also be used for **groundwater recharge** or agricultural purposes.

In the **wastewater treatment plant** or **Sewage treatment** we will collect liquid waste such as municipal **wastewater**, containing mainly household **sewage** plus some **industrial wastewater**.this liquie waste will be collected in a collector and it will be filtered by Physical, chemical, and biological processes and will a clean and safe water into the environment

Details related to plastic pavor block & sewage treatment plant.

Land- The plant will need upto 15 acres to 20 acres of land.

Boiler Plant- The Boiler plant with the capacity of 1 ton will be assembled in the plot of 1000 sqft. It will be situated in the corner of the plot. The Boiler plant will need fuel such as Oil, Coal, Wood etc. the boiler plant will be situated near about 500 meters far from the Solar Panels.

Solar Energy –The solar panel of 100KW capacity will be assembled in the the land of 100 * 80 sqft. The solar energy will be used for other appliances such as Mixer Machine, Shredder Machine and other Electrical appliances. which will cost 45 lakhs

Storage- A godown of capacity 500 tones will be needed in ¼ acres of land

Vehicles- The transport vehicle such as Trucks and small Metadors will be needed

Trucks- 02

Metador- 02