

“SANITARY DUMP YARD”

INNOVATIVE IDEA FOR WASTE
MANAGEMENT

Sanitary Dumpyard :-

Is a technology in which sewage material or industrial waste will be allowed to decompose into biologically and chemically inert materials in a setting isolated from the environment.

Problem with open Dumps



Mountains of trash gets collected in open dumps, at very large scale, these things are then exposed to the atmosphere surrounding, And because they are uncovered or Not protected soo many insects, *bacteria, viruses, diseases, pollution* starts taking place near open dumps.

So now the problem is that the problem of open dumps is rising in many countries,,, but in U.S or North American countries, the open dumps have been closed and the close dump concept have came out.

So, looking at the above case, here we came out with an innovative idea which is SANITARY DUMP YARD

SANITARY DUMP YARD is formed in such way that to concentrate and contain refuse without creating a annoyance or hazard to public health or safety.

In this dump waste will be dumped in smallest area and smallest volume and will be covered with soil on daily basis. So that open air doesn't stays and it doesn't exposes with environment and doesn't spread any dirt disease.

The process is like :-

Initially a large pit is made by the removal of the top soil, it is then lined with a synthetic plastic in order to prevent leakage waste materials. This is called the bottom liner. Then garbage wastes are dumped into the landfill and properly compressed using specialized machines. (The garbage may contain sewage sludges, pathological waste, chemicals, vegetable waste etc can be disposed of at sanitary landfills under special conditions).

Pipes are inserted in order to drain off liquid materials that allows to flow out following compression.

Methane gas produced by the decomposition of wastes is collected into separate pipes. This is done to prevent explosion the methane may now be burnt to generate **HEAT & ELECTRICITY.**

Daily wastes are covered by clay and top soil in order to prevent exposure in air, pests and to prevent foul smell.

Specialized storm water pipes are fitted to divert and control water run-off from rains and storms. This is an ideal method for the disposal of solid wastes.

EXAMPLE OF USAGE

Suppose Nashik has 3 numbers of MIDC.

All the wastes generated from the industries suppose 40% plastics waste generated can be collected at place to dump it.

After some years, the dump would get filled than.

After some years when industries will expand we will require another landfill to dump waste.

So, in that place we can create on sanitary dumpyard. In that we can assign a particular area for eg :- in our case we can assign the first landfill for that sanitary dumpyard.

And we can use the **HEAT & ELECTRICITY** produced from the methan gas for industrial purpose, Later.

Some *ADVANTAGE & DISADVANTAGE* of sanitary dumpyard.

ADVANTAGE :-

- 1) Methane gas produced can be used for producing electricity.
- 2) Waste water after treatment can be again used in industries after recycling it.
- 3) Electricity produced can be again given to industries at subsidized rates.

DISADVANTAGE :-

- 1) Sometimes landfill may pollute the soil.
- 2) Leakage may take place.
- 3) Methane gas may burst.

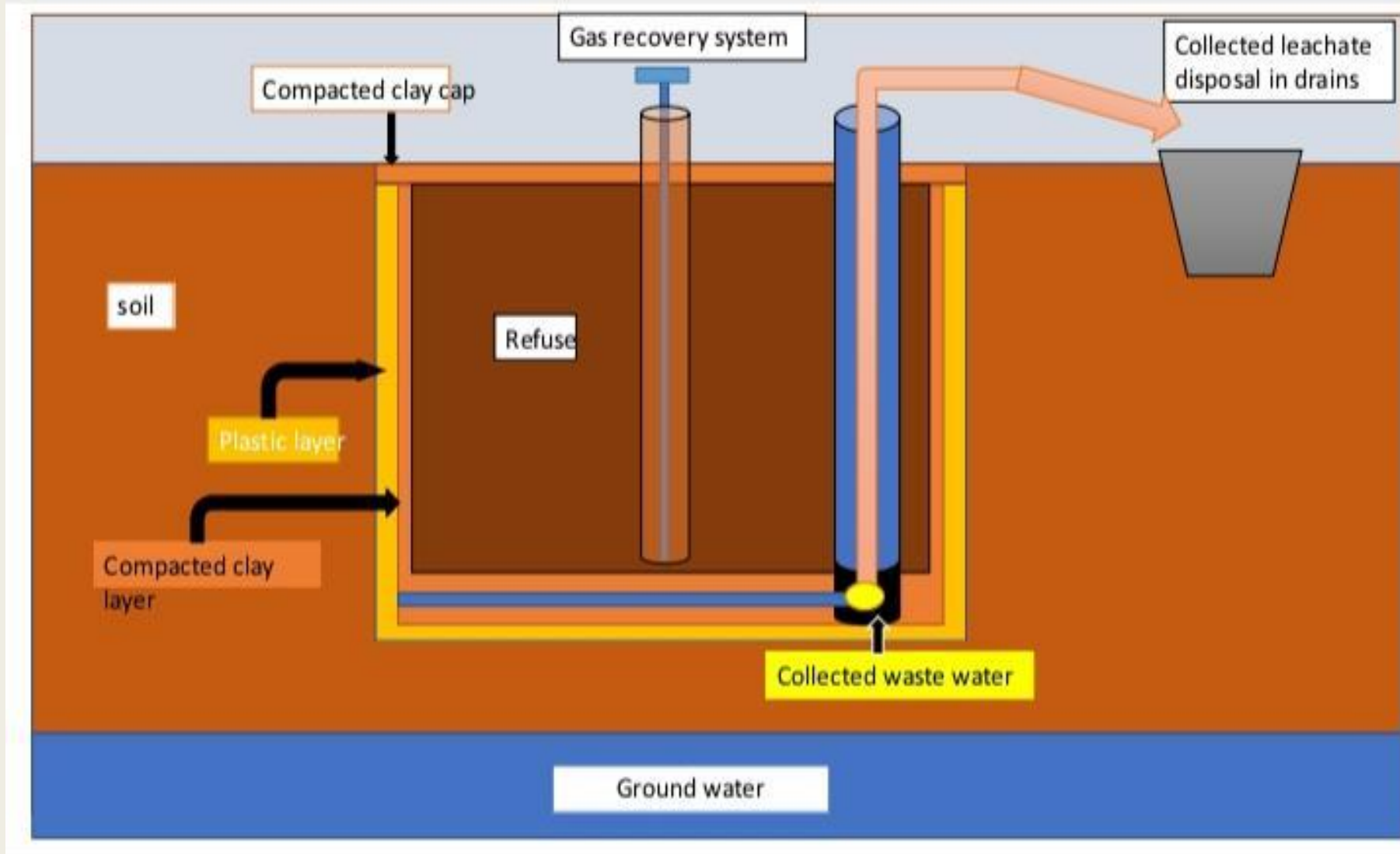
This Idea we can also implement in our school like :-

The wastes which are collected in our school can be *pencil waste, paper cut offs, paper plates and glasses from canteen etc dried leaves, weeds, and branches* also.

So, here we can also construct a dump in the backside of our school, and dispose all the wastes there, and cover it with soil again and again this process will be continued and after some months or years the dumpyard will be filled and the methane gas produced can be used to produce heat and electricity and the waste liquid can recycled and given to the plants in our school. In this way after it gets filled we can cover it with layers of sand and construct any suitable thing according to the surrounding.

HENCE, THIS IS ONE
MORE BETTER IDEA TO
KEEP OUR SURROUNDING
CLEAN AND PEOPLE
HEALTHY ,, KNOWN AS
SANITARY DUMPYARD.

Sanitary dumpyard



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30/06/2022