

# To Make Artificial Ponds, Lakes or Canals as a Waste Water Treatment Plant (Sokhta) To Absorb the Waste Water to Earth

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**Abstract – Today world is facing waste water pollution due to sewage water, industrial waste thermal waste water etc. and also low water level of earthen water inside the earth. This study show that how the waste water (polluted water) are clean and absorb by the earth through an artificial ponds, lakes or river after the waste water is treated in dome type structure given in waste water treatment plants in this study. This study also show that how we generate the biogas( combination of gases like methane, butane, propane or other hydro carbon gases) through waste water treatment plant and this gases is burn in thermal power plants, buses ,small trucks( auto vehicle) to create energy and utilize it in to make electricity and movement of the vehicles.**

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## INTRODUCTION

In this study show that the how the municipality waste (sewage water), industrial waste water, thermal or nuclear waste water is treated to clean it from polluted waste water and generate the electricity though making dome type biogas power plants( this is already exist in some countries like Sweden, china, very less amount power generate through cow dung (biogas)power plant in India city like Etawah and Mainpuri (Utter Perdesh) etc. as a renewable energy sources) and also recharges the earthen water level through a Pit ( a deep dug without concrete) we say that it **Sokhta**. This will absorb the filter the water and recharge the inside earthen water. Therefore we not fall the waste water after the treatment directly towards the our natural resources like river, lakes and ocean. When we do the treatment in dome type biogas plants we also found the manures (natural fertilizers) due to precipitation process it will be up side (low density solid waste) and downside (high density waste). This should be remove through robotics arms from the treatment plants and dumped it in a without concrete pit ( we say that a deep earth whose depth is not more than 3-4 meter) more than 3- 4 moth upside it, cover it. Because this not give a bad smell inside the Environment. After 3 - 4 month these manure change to a Fertilizers due micro-organism are present inside the earth and the manure. These fertilizers are utilizing to grow the crops and plants, tree.

## THEORY

Waste water sewage will be collected to the outside of the locality (city) from

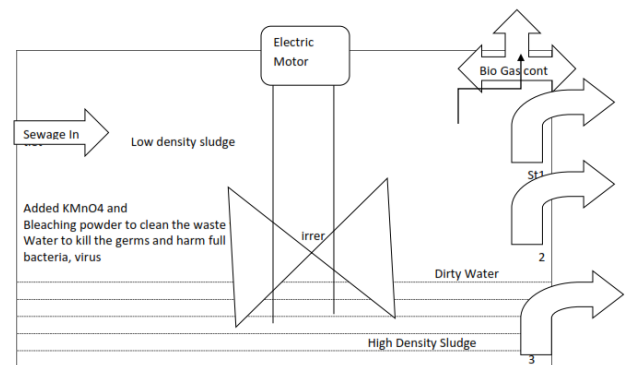


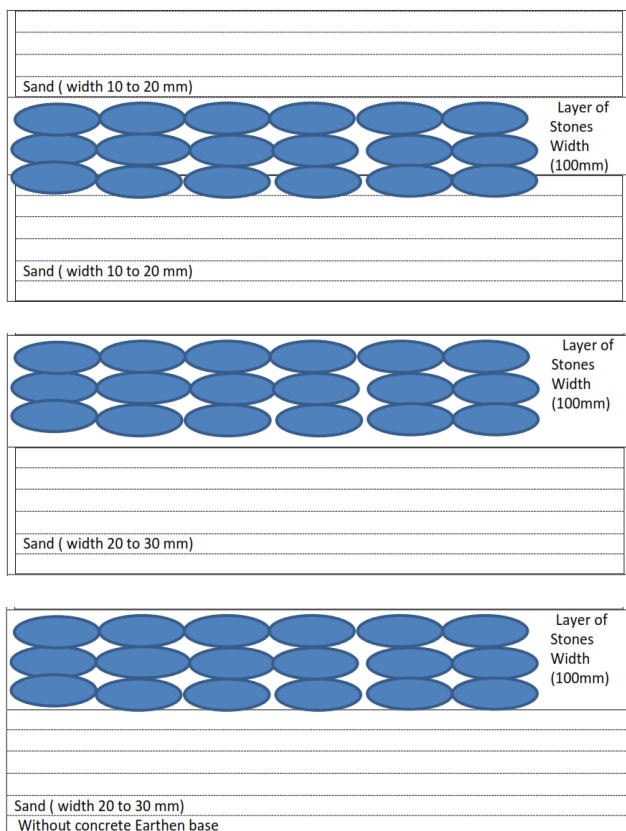
Figure 1 Dome type bio-gás Power Plant (sewage treatment Plants)

Here

- 1 out let of low density sludge
- 2 out let of waste (treated) water
- 3 outlet of high density sludge

The sewage water line and is accumulated in a dome type cavity (it is shown in figure1). When the sewage water come in inlet. it is stored in every day because in every city have a large amount of

sewage water due to high population. After storing it we will stirred by an electric large fan. Due to stirring, the sludge is separated due to high velocity. This change of velocity gave a kinetic energy this energy is utilize at to convert an electric energy (In 1985 Etawah and Mainpuri, In Uttar Pradesh, India, the former will produce a little amount of energy to give electricity to one home through stirring of a fan in cow dung through bulls. This is fail due to starting torque is given by Bull and it is open cavity, therefore a bad smell occur in the locality). Therefore we say that starting torque for given by electric motor and change in velocity is utilize as a to generate small amount of Energy. But stirring also separated the solid waste and the liquid waste .The high density solid waste (sludge) are settled downside of the cavity and the low density solid waste (sludge) are precipitated at the top. These removed through a **robotic arm** every day and dumped in a 5-4 meter deep without concrete earth. These sludge ( solid sewage waste)convert to manure (natural fertilizers)in 4-5 month, because in without concrete earth have microorganism they change these solid waste to manure it earthen deep cavity also closed not open because it give bad smell and spread the germs through air.



**Figure 2 Structure of artificial Ponds, Lakes, artificial Canals for Industrial outlets waste water, municipality waste water**

When we stirred the sewage water we also found the biogas (combination of hydrocarbons gases like methane, propane, butane etc.) we collect it when it come from an outlet of the cavity in container. It

should be utilize in burning in thermal power plants to make steam in boiler, it is also used to burn in light auto-vehicle (Like CNG gas car or small buses, small trucks) to run it on the road. It never use in cooking purpose because it have bad smell and germs.

After we remove the sludge we have in cavity dirty water. We added bleaching powder (chlorination) and  $KMnO_4$  to kill the germs, bacteria and virus. And these treated water to escape though passage outlet of waste (treated) water and make a structure as shown a figure2 to store as an artificial ponds or lakes. If the quantity of waste( treated) water is more make an artificial river whose length is more and the bed structure is like figure2 and then fall in the natural resources like ocean, natural river etc. To reduce the solid sludge( gaad) in the movement of these waste ( treated ) water we utilize filter before entering the waste water into the artificial river, ponds, lakes and this also clean periodically through robotics arm.

The structure of artificial ponds and lakes , and river basin are as the length and breadth depends on the quantity of waste (treated) water but the basin of these is describe as first earthen base without concrete, then a layer of sand width 20 to 30 mm, then a layer of stones small width 100mm to 200mm, then again a layer of sand width 20 to 30 mm, then again a layer of small width 100mm to 200mm, then again a layer of sand width 10 to 20 mm, then again a layer of small width 100mm to 200mm and at last upper portion of this basin layer of sand width 10 to 20 mm. This structure is filter due to porosity in this and absorb the waste(treated) water by earth and rest water I fall in the natural resources of water but you increase the flow-ability ( length of the movement of water) of these treated water because they absorb by the earth and/or clean the water .

In this artificial basin river, lakes, ponds nearby we grow the Furniture plants like seesam, mahua, asoka, ukaliptus tree who not give the fruit. These trees also absorb the water and also give the strength of this artificial basin.

## RESULTS

When we use these type sewage water treatment strategies the following observation we will found

1. We clean all the sewage water in all the cities.
2. We will found the electricity through changing the velocities in stirring the dome type structure.
3. We will also found the biogas when we burn it got steam in a boiler (also we take the treated water in boiler to make steam

after sterilization process of treated water because sterilized water not give the corrosion in boiler) and generate electricity through steam turbine.

4. It also used for water harvesting in earth to increase the water level inside the earth because this Soktha (pit) basin used for absorbing water and filter it.
5. This method is used to clean the natural river, lakes, ponds, ocean because the treated water is not fall directly towards it.
6. This treated water clean the germs, harmful bacteria, virus etc. because waste water is treated it by bleaching powder (chlorination),  $KMnO_4$ .
7. These method is successfully adopted by in India when the well, tube-well water is there. The Man is clean/ filter the water in small amount in villages. They say in it as Soktha in 1985. Now we if we implemented in large scale we will got good results.
8. The cost in this waste water treatment plants it very low.
9. It is easy to implemented.

## CONCLUSION

We have concluded that if we implemented this waste water treatment strategies to clean the ours rivers like ganga, Yamuna, barahamputra, amezan, rayeen, Nile rivers, natural lakes and ocean etc. All the cities are situated near the river bank, or lakes or ocean. Therefore every city have a high quantity of sewage water that's be directly/ or after sewage treated water fall on these natural resources of water. Therefore if we small change in our sewage treatment plant then we will found the good result to clean our natural resources of water and also found the electricity. Also increase the water level of the earth. Also found the good quality furniture woods.

## FUTURE SCOPE

1. If we adopted this strategies we not used the fresh water in thermal power plants use these treated water in boiler for generation of steam
2. To estimate the cost how much we invest in this project and how much we found.
3. To see how much we increase the water inside the earth.
4. To see how much we grow the furniture plants.

5. How much we clean the air pollution to grow the plants.
6. To see how much we clean the sewage water by treated this methodology.
7. How much to reduce dirty ness in our rivers in ppm (hardness).
8. How much we reduce fly ash because we burn sewage biogas instead of coal in thermal power plants

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