

# Free research paper on wastewater treatment

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## **Sewage at home**

For a number of years, my perception of where sewage from our home was being disposed of was very limited. One would easily assume that it is channeled to a nearby river through underground pipes, but that was not the case. Sewage from my home is directed to a near wastewater plant that ensures that it is cleansed. The plant is owned by the county sewage management authority, which also ensures that it operates at an optimum level. This ensures that air pollution, soil pollution and even water pollution is kept to a minimum. As a result of the abundance of homes in my area, having a septic tank for everyone would not be a logical move.

In a quest to have a better understanding of how wastewater in my area is handled, I had to take a step further and visit the local treatment site. It was clear that their key technique of disinfecting water is by using ozone. It was further explained that the method enjoys approval from the Food and Drugs Authority and is considered to be safe. The ozone is manufactured at the site and is said to be very powerful in killing pathogens that exist in the wastewater. After treatment, the water is separated from the sludge and channeled for further cleansing processes before release back to the system for re-use. The plant relies on the use of aerobic digestion as a way of treating sludge. It was stated that it is a cheap option that allows for the waste product to be usable on land as fertilizer (Tchobanoglous, 2013).

## **Guidelines for treatment of sewage**

The EPA has the authority to revise some of the rules and regulations that oversee its operations in different places. The unique nature of every

disposal site requires customized regulations to ensure that the ultimate goal of properly disposing of the waste without endangering the lives of the citizens is achieved. Some of the areas that are key in these rules and regulations include the protection of tap water and water tables. Every citizen has the right to access clean tap water. With that in mind, we can recognize why such rules and powers of operation have to originate from the congress and further signed by the president, becoming law.

In order to be capable of working efficiently and at low cost, EPA, working together with local sewerage disposal authorities ensures that the treatment of the wastes starts from the source. Such a move is aimed at reducing the budget used in wastewater along with drinking water treatment (Sol J. Arceivala, 2007). By treating the wastewater from the source, the authorities can collect much-needed data on specific pollutants hence properly handling the variations that result from the diversity of sources.

A national sewage sludge survey report is always compiled on an annual basis. This helps in having a sufficient understanding of the materials present in sludge from different regions. In the case of an institution or even an industry dispose of toxic wastes, the EPA has a mandate to ensure that they have a permit (Staff, 2014). This authorization can go as far as compelling the industries to set up private treatment plants as a measure to protect the masses.

## References

Sol J. Arceivala, S. R. (2007). Wastewater Treatment for Pollution Control and Reuse. Noida: Tata McGraw-Hill Education.

Staff. (2014, 05 09). United Nations Environment Programme. Retrieved 10

<https://assignbuster.com/free-research-paper-on-wastewater-treatment/>

08, 2014, from UNEP: [http://www.unep.or.jp/ietc/publications/freshwater/sb\\_summary/10.asp](http://www.unep.or.jp/ietc/publications/freshwater/sb_summary/10.asp)

[http://www.unep.or.jp/ietc/publications/freshwater/sb\\_summary/10.asp](http://www.unep.or.jp/ietc/publications/freshwater/sb_summary/10.asp)

Tchobanoglous, G. (2013). Wastewater Engineering: Treatment and Resource Recovery. New York: McGraw-Hill Education.

Unknown. (2014, 02 01). United States Environmental Protection Agency.

Retrieved 10 08, 2014, from EPA.gov: <http://water.epa.gov/scitech/wastetech/>

<http://water.epa.gov/scitech/wastetech/>