# Decontaminating water with the help of solar energy

Arboleda Pamela, Cacao Carla, Calinisan Hannah, Noblezala Angela Marie

August 26, 2014

## 1 Statement of the Problem

Helping the community in solving the problem of continuous lack of clean drinking water.

## 2 Hypotheses

### 2.1 Null Hypothesis

- The decontamination of water experiment cannot cannot solve the continuous lack of clean drinking water.

### 2.2 Alternative Hypothesis/es

- The decontamination of water experiment will lessen the continuous lack of clean drinking water.

- The decontamination of water experiment can be an alternative for clean drinking water.

## 3 Significance of the Study

- Through water purification and disinfection the polluted water or the uncleaned water can be used to help the community in drinking clean water

- Instead of making use of other ways in making water clean that may harm the environment, we can just make use of recyclable materials in making a devise that will provide us clean drinking water

- Instead of making use of electricity, coal and other non-renewable resources, we could just use a renewable source which is sunlight

# 4 Review of Related Literature

## 4.1

Sun is the only source of new energy in the earth collection and using solar energy's methods has categories including passive solar heating. It is the direct use of the sun's energy in maintaining comfortable indoor temperature (McGraw-Hill)

## 4.2

Boiling water is the best way to kill bacteria, viruses and parasites but it cannot make heavily polluted water safe. (Disinfecting Drinking Water, 2014)

## 4.3

"To disinfect drinking water means to clean or sterilize it so that it does not infect humans and animals, and their surrounding environments. You disinfect water when there is a chance it carries germs that could make you sick." (Disinfecting Drinking Water, 2014)

## 4.4

You should disinfect drinking water because it will kill germs, viruses and parasites that can cause the spread of different diseases. These diseases can be spread by germs and it can infect drinking water. Water-borne infections like Campylobacter, Salmonella, Cholera, Amoebic dysentery, Giardia (beaver fever), Cryptosporidium, and Toxoplasma. (Disinfecting Drinking Water, 2014)

## 4.5

"If the water is cloudy or murky, filter it before boiling or treating the water, Pour the water through a clean cloth or coffee filter. Let any remaining bits settle to the bottom. Pour off the clear water into clean containers made for storing food or water. The water might still look a little cloudy. If you are ever unsure about the safety of your water, even after it has been filtered, do not consume it." That's why we added purification in our research. (Disinfecting Drinking Water, 2014)

# 5 Statement of the Research Question

Would the decontamination of water research be a reliable and effective alternative in purifying and disinfecting water to the community?

# References