Homemade Water Purifying System

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Having a source of potable water is essential for every country's survival. Therefore, people need to know how to supply themselves with purified drinking water in case of a crisis. As in Puerto Rico, being a month into Hurricane Maria's disaster, only 16.89% of the consumers had domestic water service. Using materials found at home, it is possible to create a purifying system which is an alternative to the conventional house water supply on which we depend for our daily lives. After taking samples of spring and river water, both were taken through the purification procedures of the built system. When the final products were obtained, they were analyzed at a laboratory for potability purposes both before and after the purifying process. Afterwards, they were compared to determine if the system was effective or not, according to the potability parameters established by the local water supplier. The results that were gathered showed a satisfying answer to our doubt on the system's effectiveness. The tests performed on the purified samples were: chlorination (0.2-4), turbidity (0.0 – 0.3) and pH (6-8) levels. Therefore, the results of chlorination (1.81- 1.87), turbidity (0.04- 0.13) and pH (7.12) were accepted by the parameters before mentioned. This study showed that the built system was effective, when both purified samples were compared to the water supplier's parameters. Proving that the system is simple and effective, making it the solution to a problem we could face at some point when humanity lacks of potable drinking water.

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