

DESIGN AND BUILD PEAT WATER CLEANING FILTER WITH 4 WATER FILTER TUBES

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ABSTRACT

Contamination of water by peat has a negative impact on water quality. Organic substances in peat can cause changes in pH, decreased levels of dissolved oxygen, and increased levels of water turbidity. In addition, the toxic compounds in peat can also harm living things if consumed or used directly. In an effort to overcome the problem of water contamination due to the presence of organic substances such as peat, the design of a water purification filter is a potential solution. A water purification filter is a device or system designed with the aim of removing organic matter and other solid particles from water. The test results from each filter tube get different results from the pH value and the parts per million (ppm) value. It is known from the experimental water which before being filtered contained a pH of 7.57 and a solution or particle abundance of 1050 ppm. And the water that goes through filter 1 contains a ph of 7.19 ppm 0897. Filter tube 2 ph 7.28 ppm 1121. Filter tube 3 gets a ph of 7.25 and 0975 ppm. Filter tube 4 ph 7.08 ppm 0975. Making this water filter can help complaints for homes that still using drilled wells without water filters. This tool can filter cloudy or mossy water.

Keywords: *Peat Water, filter, Dakron, Zeolite, Silica Sand*