



OIL TRAP BY USING CHARCOAL AND DURIAN PEEL AS FILTER

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DESCRIPTION OF INNOVATION

Food waste is a major cause of water pollution. Waste water from food premises contain high quantities of fat, oil and grease that is derived from cooking activities, washing food materials and cooking equipment. The use of existing oil traps do not have oil separator and will result in residual oil waste and manufacture unpleasant smells.

'Oil trap by using Charcoal and Durian Peel as Filter' is different from other oil traps because it uses a filter made of charcoal that serves as a smell absorber and a water filter. Meanwhile, durian peel as a oil absorber that absorb oil from waste water from the food outlet. It is intended to produce unpolluted water quality before entering the drainage system.

The problem statement from this study is oil residues from food can cause water pollution that is harmful to the environment. Also, the residual oil can cause clogged pipes and also cause foul smell and the current design of oil trap is needs to be improve.

IMPACT OF INNOVATION

'Oil Trap by using Charcoal and Durian Peel as Filter ' is one of the ideas that are innovated from existing oil traps. This is because, the existing oil trap mainly does not have oil separator so the owner of the food premises will take action by removing the oil waste from waste water into drain then water pollution will still occur. Oil trap by using Charcoal and Durian Peel as Filter is different with other oil traps because it uses a filter made of charcoal as a odour absorber and water filter. Meanwhile, the durian peel is rich with fiber as oil absorber in wastewater from the food premises. These innovations make it easier for cleaning of oil traps, more safer and save time. Places of emphasis are the food premises. In addition, this product is able to be promoted to external markets and is able to be competitive with other products at a price as low as RM 300.

OBJECTIVE

1. To design oil waste traps that are expected to help restaurant owner, face the problem of clogged pipe.
2. To identify durian peel that can absorb residual oils and charcoal filter that can absorb odor of wastewater flowing into the drain.
3. To analyze the effectiveness of oil trap based on water quality assessment.

DIAGRAM BLOCK/ OPERATIONAL FLOW CHART

