

## Review Paper- “**KITCHEN WASTEWATER TREATMENT USING AN AEROBIC PROCESS**”

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### **Abstract –**

There are two types of processes for wastewater treatment. First is anaerobic and another one aerobic. Here in this project, we are going to use an aerobic treatment to recycle wastewater. Also, we are measuring the quality of water at different stages and that data is seen on the Blynk app. Depending on the quality of water we can use this water for Gardening, Car washing, Flushing, etc. This project consists of various sensors such as the pH sensor, turbidity sensor, level sensor which are interfaced with Node MCU through Arduino. In our project, we are using solenoid valves for controlling the flow of the water from one tank to another. Hence the treatment of waste material is so important to reuse that water for various sectors like car washing, gardening, and flushing, etc

**Keywords** – WATERTEST, WATER TRETMENT, WATER TAXES, INDIRECT TREATMENT, TRITMENT COMPLIANCE, PROFIT GAINS

### **INTRODUCTION-**

Water is one of the vital natural resources. Without the availability of water, there is no life on the earth. An increase in the developmentalism generation of wastewater increased rapidly and some countries presently facing problems of water scarcity. Therefore, reuse of that wastewater is essential for today's lifestyle. Wastewater treatment has gained importance worldwide so the application of appropriate wastewater treatment technologies that are effective, low cost, and simple to operate is a key component in any strategy aimed at increasing the coverage of wastewater treatment. Greywater is wastewater from

urban areas including kitchens that require proper treatment of wastewater before using it for irrigation purposes. In wastewater treatment, two primary types of processes are aerobic and anaerobic.

### **INDUSTRY ANALYSIS-**

Water is one of the vital natural resources. Without the availability of water, there is no life on the earth. An increase in the developmentalism generation of wastewater increased rapidly and some countries presently facing problems of water scarcity. Therefore reuse of that wastewater is essential for today's lifestyle. Wastewater treatment has gained importance worldwide so the application of appropriate wastewater treatment technologies that are effective, low cost, and simple to operate is a key component in any strategy aimed at increasing the coverage of wastewater treatment. Greywater is wastewater from urban areas including kitchens that require proper treatment of wastewater before using it for irrigation purposes. According to a study, 80-90% of kitchen wastewater can be recycled using different processes.

### **SCOPE OF THE PROJECT-**

The scopes of the project are as under:

-The benefit of study for the researcher is that it helped to gain knowledge and experience .

### **MISSION OF THE COMPANY-**

The final application of Recycled water can be used for purposes like gardening, flushing toilets, cleaning cars. This monitoring and Recycling process can be performed in various places like Household kitchens, schools, offices, colleges, Hotels, etc. In the future, we can include biological sensors for better detection of contaminants in water.

### **I. STATEMENT AND OBJECTIVES-**

Blynk Server - Possible the communications between the smartphone and hardware. We can use the Blynk Cloud or run our private blynk server locally. It is open-source, could easily handle thousands of devices.

Blynk Libraries - It can enable communication with the server and process

## **REPONSIBILITIES AND DESCRIPTION-**

- The valve is an electromechanical device in which the solenoids coil which operates electronically with DC 12 volt supply. Electric current is used to generate a magnetic field and thereby coil is energized which regulates the opening of fluid or gas flow in a valve. Depending upon which electric current they used Solenoid valves differ in the characteristics, and also the strength of the magnetic field they generate, or the what type of mechanism they are used to regulate the fluids and the type and characteristics of fluid they control. The Mechanism varies from linear action, and depends on the actuators are they used. Solenoid valves are frequently used to control the flow of liquids or gas. Solenoids offer fast and safe switching, more reliable, low control power.

## **METHDOLOGY-**

Research methodology is used for this project. It provides insights and comprehensions of the issue or situation. The initial phase of the project demanded exploratory research to capture, understand, interpret and apply the concepts and skills relating to basics of GST and return filing process of GST and technical implications.

## **METHODS-**

Building kitchens: Sewage water from buildings kitchens basin water directly goes to drainage so that this system attaches to the kitchen's basin pipe for filtering that water and reuses it for various purposes.

In this way, we reduce the wastage of water in the previous manner which not only helps to reduce the scarcity of water but also will help to prevent the environment.

## **Hotel canteens: In the canteen also that EXPERIENCE USEFUL IN FUTURE CAREER-**

Yes, there are a lot of future career options if we working under tax consultancy. If you enjoy working with people, the challenge of problem solving and an ever-changing, dynamic working environment then career is tax for you.

You get to apply your communication skills by explaining complicated tax compliance matters in simplified terms to clients.

We can go for higher studies we can do diploma auditor exam. We can do Chartered Accountant. Also, we can opt for Govt. exam.

If we doing internship or taking an experience from a long time in this, we find we can get our own clients and earn good money and getting good opportunities to grow more in career. We can start our own firm after getting a knowledge, experience and education.

Also, if we want to become a GST specialist, you should consider signing up for the GST practitioner training and certification course. Such programs are available across India. This will help you to progress in your career.

## **CONCLUSION-**

The design of a low-cost reliable system “Kitchen Wastewater Treatment Using Aerobic Process” is presented. Due to increasing urbanization wastewater recycling system will help to reduce the effect of scarcity water in the future. The Proposed System Consist Of a pH sensor, Turbidity, level sensor for checking and continuously monitoring the quality of water at the primary and tertiary stages, and a solenoid valve will control the flow of water. The major advantage of this system is not only monitoring the quality of water.

## **Referance**

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