

## **INDUSTRIAL VISIT OF 2018 – 2022 BATCH**

### **GARBAGE AND SEWAGE WASTE TREATMENT PLANT CALANGUTE, GOA**

Batch 18 students of SSET (2018 - 2022) visited Garbage and Sewage Waste Treatment Plant Calangute, Goa on 28th March 2022. This plant treats around 1000 tons of waste a single day. The byproduct of sewage treatment is a semi-solid waste called slurry which has to undergo further treatment before being suitable for disposal or application to land.

After entering the field, the municipal solid waste will be unloaded on the discharge platform and the uniform distributing machine plays a role in uniform distributing, to ensure that the follow-up equipment can work normally and efficiently. After uniformly distributed, the solid waste is sent to the manual sorting platform by belt conveyor, where the workers will sort and select the large objects (quilts, cotton clothes, trunks, branches, long sticks, brick, stones, bottles, etc.) and hazardous waste.

They treat both dry and wet wastes. Wet waste is all the kitchen waste that we produce. This includes vegetable peels, used tea, fruits, leftovers, etc. This is biodegradable organic waste that can also be composted. Dry waste comprises paper, glass, plastic, cardboard, Styrofoam, rubber, metal, food packaging material, etc.

Sewage treatment plants need to be emptied at least once a year because only the wastewater is ejected. A bad smell usually just means that it's time to be emptied. It's important to remember that all treatment facilities have the potential to generate odours. In most cases, the root cause of the smell is an anaerobic, or septic, a condition where the oxygen flow to the water or wastewater is limited. Coconut shell is used to stabilize the bad odour.

Coconut refuse such as shell, coir, husk – which is natural, inexpensive and readily-available, is an excellent bio-adsorbent. They have beneficial properties such as structural stability, high absorptivity, porous structure that make them excellent bio-adsorbent for wastewater contaminants.

The industrial visit was a great experience as we are pleased that we were able to meet our goal of learning as much as possible about waste management processes. Employees at the company also went out of their way to explain each stage of waste management and were really helpful.

