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#### KKR & KSR INSTITUTE OF TECHNOLOGY & SCIENCES (Approved by AICTE, New Delhi, Affiliated to JNTUK, Kakinada) Accredited By NAAC With 'A' Grade Department Of CIVIL Engineering

# **REPORT ON WATER TREATMENT PLANT VISIT**

Title: Visit to water treatment plant

Place: TAKKELLAPADU

DATE: Visited on Feb 13th 2020

Coordinator of the industrial visit: Mr.J.NAGA MOHAN. Asst Professor Mrs.T.NEELIMA Asst Professor Mr.A.VENKATESH Asst Professor

#### Introduction

The plant that our students visited supplies 40 million liters per day (MLD) with an assured supply of 135 liters per capita per day (LPCD) to each household in the city and parallel merged villages has been designed to meet the drinking water requirements till the year 2040.

## **Filtration Plants:**

The major source of drinking water is Krishna River from where water is pumped to the filtration Plant. In addition to two 45 MLD filtration Plants, the GMC has built another 45 MLD plant. The 27 MLD filtration Plant at Sangam jagarlamudi is also being augmented. The new 45 MLD filtration Plant would be opened. As a part of project, 18 new reservoirs were built of which 16 had been completed

# **Treatment process:**

The process includes the collection of water from the intake and sent into the blowers where screening and straining processes are done. This process is continued by the addition of chemicals like Alum where it is used as a coagulation agent in water purification. After the addition of Alum, water is sent to two different clariflocculators where the suspended water particles as well as sediments are removed by pressure applying method. These clariflocculators consists of three different circular chambers at different levels and Last level consist of holes from which water is sent to the filter beds. From each clariflocculator the water is passed to filtration channel which consists of 6 filtration beds. The filtration beds consists of layers of different sizes of aggregates, mainly sand. In the last stage of purification the water is sent for chlorination where pathogenic bacteria, viruses get killed and water is free from all contaminants. The water thus treated is examined in the lab. The parameters like turbidity, quantity of chlorine added, presence of pathogens is checked before sending to the household. Water is assessed at consumer end by collecting number of samples at different locations in the city limits



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## Advantages

- 1 Provides clean and reusable water
- 2 Protect environment
- 3 Prevents people from water-borne diseases
- 4 Yields economy

#### Conclusion

Through this the students got to know about the entire treatment process and the importance of water and the distribution system.



