



Rajiv Gandhi College of Engineering, Research & Technology, Chandrapur

Department of Civil Engineering

Report

On

Site Visit

Water Treatment Plant, near Law College, Chandrapur

Organized

By

Department of Civil Engineering

Under the Guidance of

Dr. A. P. Singh

Date:- 5th March 2019

Brief Report

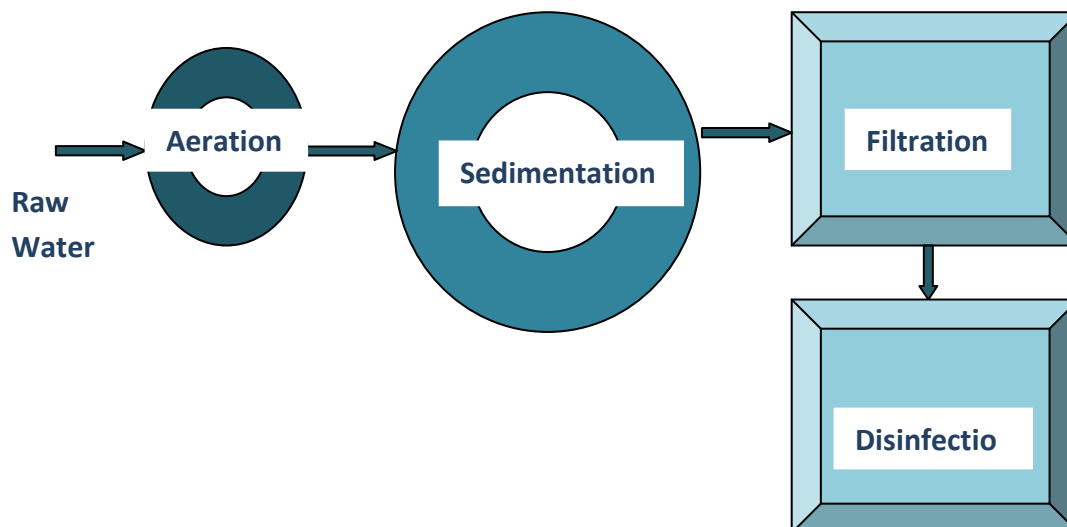
“Site visit at Water Treatment Plant, near Law College, Chandrapur”

Civil Engineering Department has successfully organised a site visit on **5th March 2019** at water treatment plant, near Law College Chandrapur.

Total 48 numbers of Second year Students of Civil Engineering Department visited water treatment plant to observe the functions of various components of Municipal Water Treatment Plant.

The main purpose for this visit is to be familiar with industrial environment and to get practical knowledge of water treatment plant components. Also in 4th semester subject Environmental Engineering requires knowledge about how polluted water is being treated, so it is very much convenient to see all the components in real time work environment.

Chandrapur Municipal Water Treatment Plant is located in Tukum Area of Chandrapur district. Water treatment plant treats 42 MLD of water from Irai Dam located 20 Km from the WTP. Er. Vivek Taman, Incharge Engineer explained purpose, principles & operation of various units of water treatment plant in detail. The first two units for the treatment process are the Aeration & sedimentation tank with flocculator. There were 2 units of Sedimentation Tank and 2 units of flocculator. Addition of Alum was only done during monsoon season; otherwise the flocculator works as a sedimentation tank. After the flocculation tank the water reaches to the rapid sand filter. There are 06 filter units. The filter unit consists of a fine sand layer, coarse sand layer and gravel layer. In every 4-5 hours, backwashing is done for 30 min. After the filtration process, Chlorination is done. Normally 500 gm chlorine per hour in the form of liquid gas was added. But as the turbidity increases, they increase the chlorine dose. In monsoon, this dose can be increased to 5000 gm per hour. The maintenance work of this treatment plant is done yearly before monsoon and the treatment plant shuts down for 10-15 days for maintenance. The flow diagram of water treatment Plant shown below:



Municipal Water Treatment Plant, Chandrapur(MS)

(Incharge: Er. Vivek Taman)



Circular aeration tank



Rapid Sand Filter back washing procedure



Group photo