Vidya Prasarak Mandal, Thane's
Maharshi Parshuram College Of Engineering
Hedvi-Guhagar road, At: **Velneshwar**, Taluka: Guhagar, Dist: Ratnagiri (Maharashtra) 415 729
(AICTE & DTE approved and affiliated to University of Mumbai)

Tel No. 02359-205237 / 38
E-mail: mpcoe@vpmthane.org / info@vpmmpcoe.org
URL:www.mpcoe.org

Department of Civil Engineering

Date- 12 October 2019

Report on Industrial Visit to Water Treatment Plant MIDC Ratnagiri

Name of Industry Visit: Water Treatment Plant Chalkewadi Ratnagiri

Date: 11th October 2019

Time: 8:30 am to 6.00 pm

Number of students attending: 40 Students of TE Civil

Guide: Mr. Kolekar and Mrs. Nagvekar MIDC Ratnagiri.

Contact Details: Mobile: 8888817868

EmailID:deratnagiriem@midcindia.org, eeratnagiri@midcindia.org

Co-ordinator- Mr. Mandar Pawari (9689073633)

EmailID- mandar.pawari@vpmmpcoe.org

The department of Civil Engineering of VPM's Maharshi Parshuram College of Engineering organized industrial visit to **Water Treatment Plant Chalkewadi, Ratnagiri** for T.E Civil students. As it is mandatory to fulfill the curriculum requirement of Mumbai University under the subject of Environmental Engineering-I.

The journey commenced on 11th October2019 with 40 students and 2 faculties. Mr. Mandar Pawari and Ms. Geetanjali Sawant accompanied and guided the students throughout the visit.

The Executive Engineer of MIDC Ratnagiri Mrs. Nagvekar and Mr. Kolekar guided the students throughout the visit.

Water Treatment plant Chalkewadi is 10 km away from Ratnagiri city. The capacity of WTP is 10 MLD. The source of water is river at Harcheri. So all raw water supplies from Harcheri to WTP chalkewadi by gravity. There is no. of treatment units at water treatment plant. At WTP First unit is Aeration which remove bad odour and gasses from water. Water is allowing to free fall over 7 steps so that water comes in contact with air. It removes 80 % of CO_2. Next to that sedimentation and coagulation tank for removal of suspended and dissolved solids from water. Before supply of water to sedimentation tank alum is added to raw water as coagulant. Thus all suspended solids are removed in sedimentation tank. Next method or Unit is filtration. There are 4 no. of rapid sand filter beds used for water filtration. Water is allowed to pass over sand and gravel bed which traps the impurities in water. Finally water is disinfected by chlorination. Chlorine is available in gas form but before apply it is converted to solution.

Treated water is stored in 2 tank having capacity of old tank is 4000 liter and new one 2500 liter. The treated water from plant is supplied to Ratnagiri city and Industrial area MIDC Ratnagiri.

Outcomes of Visit

1. Students are able to understand the functions and methods of water treatment plant
2. Capacity of WTP and supply of treated water to Ratnagiri
3. Design of Water Treatment units
4. How to check water Quality

Students with Visit Guide

Aeration

Sedimentation and Coagulation Tank

Prof. Shekhar G. Sawant

HOD