



Parshvanath Charitable Trust's
A. P. SHAH INSTITUTE OF TECHNOLOGY
(Approved by AICTE New Delhi & Govt. of Maharashtra, Affiliated to University of Mumbai)
(Religious Jain Minority)

DEPARTMENT OF CIVIL ENGINEERING SITE VISIT REPORT

Subject: - Environmental Engineering 1

Site Visit Date: - 16-02-2018

Site:-Water Treatment Plant, Pise-Panjarapur

Site Address:- Pise-Panjarapur Complex, Tal. Bhivandi, Maharashtra- 421302



As per the curriculum of University of Mumbai, students of Third Year Civil Engineering having Environmental Engineering 1 subject, required to visit Water Treatment Plant site as a part of their term work.

A site visit was arranged to Pise-Panjarapur WTP, Panjarapur, Tal. Bhivandi, is run by BruhanMumbai Municipal Corporation, Mumbai.

About the Plant:-

Pise Panjarapur (Capacity 2000 mld) is one of the biggest treatment plants in Asia run by Mumbai Municipal Corporation. It consists of various stages of treatment Plant Stage I, Stage II & III, Stage IIIA.

Presently treating 1100 Mld of water and in future it will add further 455 Mld of water for Mumbai. There is water loss of approximately 55 to 65 mld in the various treatment processes of these stages of treatment plants. This waste water generated from Filter Backwash & Clarifier Desludging is having very high turbidity & suspended solids. This water is discharged into a nearby seasonal natural stream which ultimately goes into Kalyan creek.

To supply safe drinking water is the responsibility of any water utility. In Water Treatment Plant plant the raw water is treated for physical, chemical and biological standards to achieve the required drinking water standards.

In this site visit, students have got the knowledge regarding –

- Functioning of water treatment Plant in actual practice.
- Various essential units of WTP
- Technical details of each unit with their working
- The various routine laboratory tests done on raw as well as pure water.

Also they studied the characteristics of raw and treated water which help them to understand the effectiveness of treatment so as to achieve the permissible drinking water standards.

Remark: PO1, PO2, and PO3 are mapped