

# **SILVER OAK COLLEGE OF ENGINEERING & TECHNOLOGY**

## **DEPARTMENT OF CIVIL ENGINEERING**

### *Report on Technical visit to water treatment plant at Kotarpur*

**Date:** 20-01-2017

**Day:** Saturday

**Time:** 09:30 am to 12:30 pm

**Nos. of students:** 51

**Faculties:** Leturer Amita Shah, Asst Prof Jay Shah

**Visit:** Water Treatment Plant, Kotarpur

### **Introduction**

A 650 MLD water treatment plant was constructed from 1983 to 1987, but surface water source from Dharoi was not adequate, it was not commissioned. The Narmada canal alignment was planned by GOG u/s of Kotarpur water works and escape in the river Sabarmati was constructed and commissioned. So that Narmada canal water was available in the river to pick up this water, AMC has 2 Intake well works.

Another Plant of 200 MLD is also functioning nearby.

A 165MLD Intake well-1 at Kotarpur Water Works was constructed & commissioned at the cost of Rs. 2.02 crores in year 2003. The 330MLD Intake well-2 at Kotarpur Water Works was constructed & commissioned at the cost of Rs. 8.4 crores in year 2006 under JnNURM project. Dudheswar Water Works & seven French wells have come in operation from August 2002. Thereafter to develop an assured source, work of gravity mains was conceptualized. Gravity line of 2500 mm diameter from Narmada main canal to Kotarpur water works is laid in December 2006 & commissioned from January 2007. By this gravity line AMC getting 330 MLD water to Kotarpur water works.

### **Activity**

A brief description about the entire plant was given by Mr. Nimesh Gajjar with the help of a water treatment plant model. It was followed by visit to inlet bay, Pump House, Alum Dosing, Clariflocculators, Filtration Unit -filter bed, Filter house, Filter water pump House, Disinfection Unit – Chlorine gas Dosing unit, Sludge digestion unit- Sludge Handling Pump, Clear water reservoirs & Pumps used for distribution system.

The beautiful part of entire plant is that it is run by entirely by gravity force thus saving lot of energy.

**Objective:** The main objective of the visit was to make students aware about the real dimensions and working of treatment units on site, techniques presently applied in water treatment & its practical performance.

## Educational Site Visit Photographs



