



# AJ INSTITUTE OF ENGINEERING & TECHNOLOGY

A Unit of Laxmi Memorial Education Trust ©

(Approved by AICTE, New Delhi, Affiliated to Visvesvaraya Technological University, Belgavi)

## DEPARTMENT OF CIVIL ENGINEERING

### REPORT OF INDUSTRIAL VIST TO TUMBE DAM AND WATER TREATMENT

#### PLANT ON 26<sup>th</sup> MARCH 2018

Thumbe dam is the dam across the river Nethravathi, is constructed in the year 1993. This is old dam which could store the water up to 4m, is now submerged in the river. This is the only source of drinking water for Mangalore city and surrounding areas. To fulfil the increased demand for drinking water, new dam were constructed in the year 2016. The dams come under the Vented Dam category. The height of new dam is 11m. It consists of 30 no's of vertical lift gate and area of one gate is 10mx10.5m. These gates are operated in control room. The total length of dam is 343m. MFL (Maximum Flood Level) on 26/7/1974 is 39'. Dead storage level is 2m. The water is lifted from pump which is known as low lifting pump station (LLPS) and sends to water treatment plant

The water cannot be distributed directly, it has to be treated. The water from reservoir is pumped to the treatment plant by high lifting pump station (HLPS). The discharge of water from dam to treatment plant is 80millions ltr/day. The following are the major process which has been carried out in Treatment plant,

- Aeration
- Coagulation/ flocculation
- Sedimentation
- Filtration
- Disinfection

Alum and lime are used as coagulants to maintain pH value and turbidity of water and chlorine is added to kill disease causing bacteria. Dosage of lime and alum are controlled in laboratory.

During the visit the officials of Thumbe Dam, taken the students around the dam and explained the various details of the Dam. After visiting the Dam, we moved onto the treatment plant. Mr Rajesh, Office in charge of treatment plant, explained the student about the different treatment process. He taken the students around the plant and explained the working of each component in treatment process. 25 students of fourth Semester civil engineering along with four faculties,



# AJ INSTITUTE OF ENGINEERING & TECHNOLOGY

A Unit of Laxmi Memorial Education Trust ©

(Approved by AICTE, New Delhi, Affiliated to Visvesvaraya Technological University, Belgavi)

## DEPARTMENT OF CIVIL ENGINEERING

Mr Dileep kumar U, Mr Nikhil N, Mrs. Deeksha Anand and Mrs. Madushree C were present for the visit.



Signature

Coordinators

Signature

(Head Department of Civil Engineering)

Signature of Principal