



K.S. SCHOOL OF ENGINEERING AND MANAGEMENT, BANGALORE-560109

DEPARTMENT OF CIVIL ENGINEERING

Field visit

To

BWSSB Water treatment plant

T K Halli Malavali taluk Mandya district.

Date: 29th Jul 2025

Time: 10 AM to 4 PM

Venue: BWSSB Water treatment plant T K Halli

Target Participants: UG students (7th semester)

Outcome of the program:

The Department of Civil Engineering, K S School of Engineering and management has organized a field visit to “BWSSB Water treatment plant” T K Halli on 29.07.2025 (Tuesday). The field trip provided invaluable exposure to one of Asia’s largest water purification facilities. Located about 95 km from Bengaluru, the plant is part of BWSSB’s Cauvery Water Supply Scheme and currently treats over 550 MLD of water, with capacity being scaled up to 775 MLD. During the visit, students learned about the identification of the level of impurities in water, the formation of the layout of the plant, identifying the level of Chlorine in the plant, and the technology adopted (DAF) for better water treatment. The visit provided an opportunity for students to get exposure to industry situations and practical experience which facilitated them to enhance their skills and industry understanding. The engineer briefed about the chlorine tank, leakage, monitoring and control initially while entering the purification plant.

The process was briefed to the students starting from the cascade aerators which are used to sediment the coarse particles and waste materials from water derived from the reservoir bed by gravity separation. He also explained the next step of treatment, i.e. chlorination and alum dosing to filtered water samples also explained the use of a flash mixture of water and sludge formation. He took students through the DAF (Dissolved Air Floatation) units and how clarified water is separated by atmospheric pressure. He gave an insight into the coagulation mechanism and flocculation techniques involved in the further processing of drinking water. The process of using sand filters called Azura filters procured from Rajasthan and Gujarat was demonstrated to students how the final filtration was done to ensure the water was suitable for Human consumption. Finally, they showed the filtration and backwashing and how water leftover after treatment is recycled to get through the serial processing techniques.

This visit provided deep insights into the technical and managerial aspects of water treatment. We learned how each stage clarification, filtration, sludge handling, and disinfection is carefully calibrated, and how seasonal variations are managed with different technologies like DAF and pulsators. The plant’s ability to operate such a massive system with limited staff (52 employees) underscored the importance of automation and efficient operational planning. Witnessing these processes firsthand transformed classroom concepts into practical understanding, offering clarity on topics like coagulant dosing, turbidity

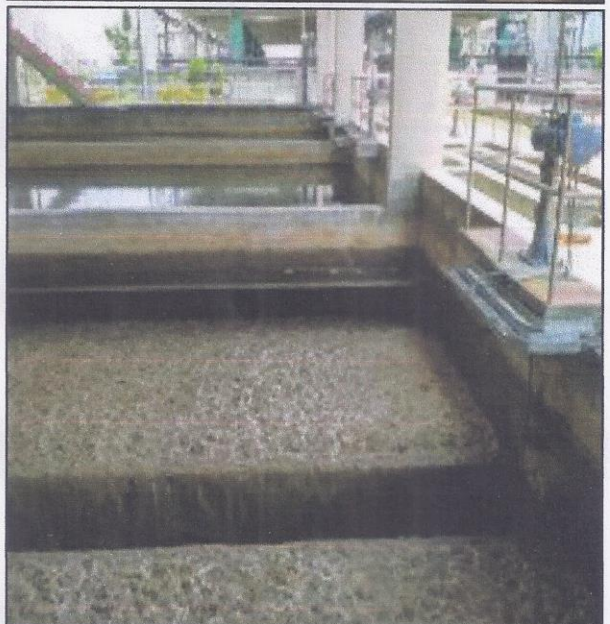
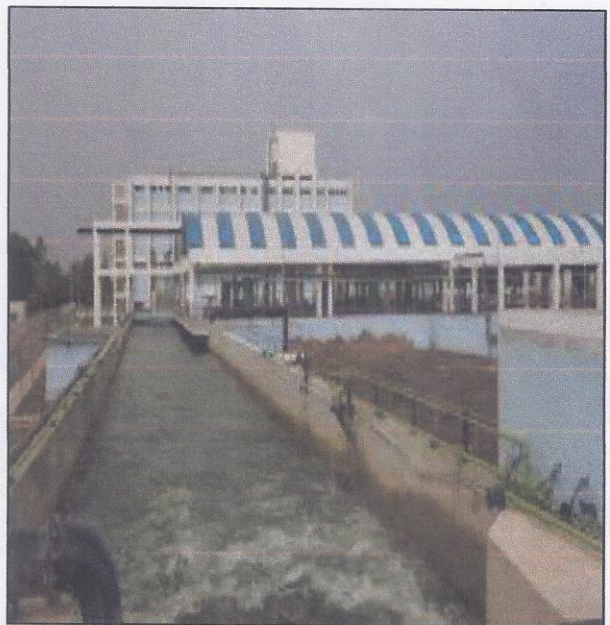
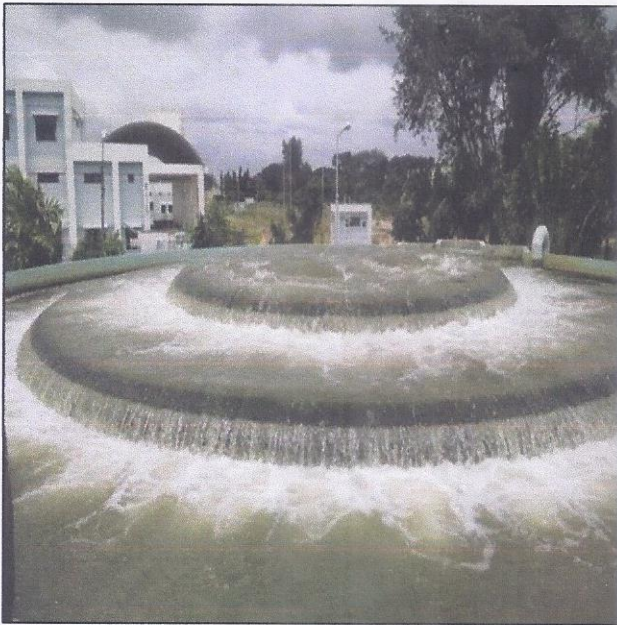
control, chlorination protocols, and large-scale pumping. Overall, the trip was a highly enriching experience that expanded our knowledge of modern water treatment systems and their critical role in supplying safe drinking water to a major city like Bengaluru.

Faculties visited to BWSSB Water treatment plant T K Halli


Dr Rashmi H R, Asso.Prof, Department of Civil, KSSEM.

Mrs Sahana K, Asst.Prof, Department of Civil, KSSEM.

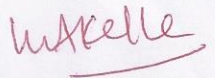
Photographs






 [Dr. Rashmi . H. R.]


 [Sahara . K]


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K S SCHOOL OF ENGINEERING AND MANAGEMENT

DEPARTMENT OF CIVIL ENGINEERING

KSSM

7th Sem Student List (BWSSB Water Treatment Plant) 29/07/2025

Sl.No	USN NO	Name of the Student	Signature
1	1KG22CV001	ARCHANA U	Archana U
2	1KG22CV002	BASAVASHRRE	Basavashrre
3	1KG22CV004	RAJESHWARI S	Rajeshwari S
4	1KG22CV005	SHASHIKALAG S	Shashikalaga S
5	1KG22CV006	TEJAS K	Tejas-K
6	1KG23CV400	AADITHEN B	Aadithen B
7	1KG23CV401	AMITH L	Amith L
8	1KG23CV402	BHARATH	Bharath
9	1KG23CV403	CHANDAN B	Chandan B
10	1KG23CV404	DARSHAN R	Darshan R
11	1KG23CV405	DEEPAK SHARMA	Deepak
12	1KG23CV406	FARHAN SHARIFF	Farhan
13	1KG23CV407	I SANJAY KUMAR	I. Sanjay Kumar
14	1KG23CV408	JAMIL AKHTER	Jamil Akhter
15	1KG23CV410	LALIT KUMAR NAIDU	Ab
16	1KG23CV411	MOHAMMED MAHEER SHARIFF	Maheer
17	1KG23CV412	NAGENDRA PRASAD K S	Nagendra Prasad KS
18	1KG23CV413	NAGESH R	Nagesh R
19	1KG23CV414	NANDISH K	Nandish K
20	1KG23CV415	NAVEEN R	Naveen R
21	1KG23CV416	NIKHIL R	Nikhil R
22	1KG23CV417	NIVAS K	Nivas K
23	1KG23CV418	RAKESH GOWDA N	Rakesh Gowda N
24	1KG23CV419	RANJITHA G H	Ranjitha G H
25	1KG23CV420	SAGAR Y	Ab
26	1KG23CV421	SAHANA M GOWDA	Sahana
27	1KG23CV422	SUPRITH K	Ab