



BRIEF Report: Industrial Visit to Delhi Jal Board, Sonia Vihar Water Treatment Plant, New Delhi



Date: 5th May, 2026

Organised by: Department of Civil Engineering

Location: Delhi Jal Board, Sonia Vihar Water Treatment Plant, New Delhi

Faculty Coordinators: Dr. Ruchika Dabas, Civil Engineering.

1. Introduction

The Department of Civil Engineering organized an industrial visit to the Delhi Jal Board, Sonia Vihar Water Treatment Plant, New Delhi, on 5th May 2026. The visit provided students with valuable practical exposure to water treatment processes, plant operations, and sustainable water management practices. Students also gained insights into advanced monitoring systems and laboratory testing procedures employed in modern water treatment facilities, enhancing their understanding of real-world applications in the field of water resource engineering.

2. Objectives of the Event

The main objectives of the industrial visit were:



- To understand the complete process of water treatment and distribution.
- To provide practical exposure regarding operation of a large-scale water treatment plant.
- To familiarize students with purification techniques and quality control measures.
- To enhance knowledge regarding sustainable water management.
- To understand the role of Delhi Jal Board in supplying potable water to Delhi.

3. Overview of the Industry

The Sonia Vihar Water Treatment Plant, operated by the Delhi Jal Board, is one of the largest and most significant water treatment facilities in Delhi. Located in Sonia Vihar, New Delhi, the plant plays a vital role in supplying safe and potable drinking water to a large population of the National Capital Region (NCR).

The plant primarily receives raw water from the Upper Ganga Canal through the Muradnagar pipeline system. This raw water undergoes several stages of treatment, including coagulation, flocculation, sedimentation, filtration, and disinfection, to remove impurities, suspended particles, and harmful microorganisms before distribution.

The Sonia Vihar Water Treatment Plant is equipped with advanced automation, monitoring, and laboratory testing systems to ensure that the treated water meets prescribed quality and safety standards. The facility also emphasizes efficient water management practices, energy optimization, and sustainable operations to address the growing water demands of Delhi.

4. Activities during the Visit

The industrial visit consisted of the following activities:

During the industrial visit to the Sonia Vihar Water Treatment Plant operated by the Delhi Jal Board, students observed various stages and units involved in the water treatment process. The visit included exposure to intake structures, coagulation and flocculation units, sedimentation tanks, filtration systems, chlorination units, and

water distribution systems. Plant officials provided detailed explanations regarding the functioning, operation, and maintenance of each treatment unit.

Students also visited the water quality testing laboratory, where they observed different physico-chemical and biological analysis techniques used for monitoring and maintaining drinking water quality standards. A major highlight of the visit was the demonstration of the SCADA (Supervisory Control and Data Acquisition) system operated by SUEZ India Pvt. Ltd., which enabled students to understand real-time monitoring, automation, data acquisition, and process optimization in modern water treatment facilities.

In addition, students interacted with engineers and technical staff members who shared valuable insights into plant operations, technological advancements, water quality management, and the challenges associated with urban water supply systems.

5. Conclusion

The industrial visit to the Delhi Jal Board, Sonia Vihar Water Treatment Plant proved to be highly informative and enriching for the students. The visit significantly enhanced their technical knowledge and provided valuable industrial exposure in the areas of water treatment processes, water quality management, and environmental engineering practices.

Few Moments



