Water treatment and reuse

Bidholi and Kandoli campuses · treating and reusing water on campus

SEWAGE TREATMENT	WASTEWATER PLANT	WATER TREATMENT PLANT	POLICY
300 KLD + 350 KLD = 650 KLD	550 KLD, reused for horticulture	600 KLD	Zero Water Discharge

Overview

UPES treats its wastewater on campus and reuses it, so that the campus draws less fresh water and releases no untreated wastewater. The university operates on a Zero Water Discharge policy.

Sewage treatment plants

- Sewage treatment plants on both campuses have a combined capacity of 650 KLD: 300 KLD at Bidholi and 350 KLD at Kandoli.
- Each plant uses screening, primary settling, an activated sludge process, sand and activated carbon filters, and UV disinfection and chlorination.
- SCADA systems monitor flow, dissolved oxygen, pH, suspended solids, COD and BOD in real time, so that the plants stay within Central Pollution Control Board norms.
- Treated water is reused for landscaping, toilet flushing and horticulture.

Treatment, reuse and recharge

- UPES has a water treatment plant of 600 KLD and a wastewater treatment plant of 550 KLD, which allows treated water to be reused for horticulture and gardening.
- Six rainwater harvesting pits with dedicated metering recharge groundwater, and an online piezometer monitors the water table.
- Borewell abstraction follows Central Ground Water Authority guidelines.

Photographs



The 300 KLD sewage treatment plant.



Rainwater harvesting well No. 6.

Source: records of the UPES Administration and Technical Services departments.

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SUSTAINABLE DEVELOPMENT GOALS
17 GOALS TO TRANSFORM OUR WORLD

UPES, Dehradun, Uttarakhand. UPES activity toward UN Sustainable Development Goal 9: Industry, Innovation and Infrastructure.