

7.1.4 Water conservation facilities available in the Institution



### 7.1.4 Water conservation facilities available in the Institution:

- 1. Rain water harvesting
- 2. Bore well /Open well recharge
- 3. Construction of tanks and bunds
- 4. Waste water recycling
- 5. Maintenance of water bodies and distribution system in the campus

#### 1. Rain Water Harvesting:

Rainwater harvesting system, also called rainwater collection system or rainwater catchment system, technology that collects and stores rainwater for human use. The stored water is used for gardening and raw use. Besides natural percolation tanks, concrete storage tanks have also been built and rain water has been stored after proper filtration. The rainwater harvested during rains not only helps to save water from conventional sources, but also to save energy and reduce expenses incurred on transportation and distribution of water.

Awareness programmes on water conservation and rain water harvesting have been Conducted regularly through various service of the college.





Photo: -Rain Water Harvesting System



Photo: - Water Recharging Pit

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### 2. Borewell and Open well (Pond) Recharge:

As the water crisis continues to become severe, there is a dire need of reform in water management system and revival of traditional systems. As a part of revival to traditional wisdom, in this institute we built a pond to collect and storage the rainwater for reuse on-site, rather than allowing it as run off.



Photo: Bore well Recharge System in the Campus



Photo: Open Well (Pond) Recharge



#### 3. Waste Water Recycling

- In order to treat the domestic and other waste waters, the sewage treatment plants STP has been installed and successfully operated within the premises. The STP capacities is 500 KLD to handle the waste waters generated from College building, Hospital, Hostels, Canteens and recreational areas such as gymnasium etc.
- The waste water is first disinfected using bleaching disinfectants and then discharged into the under drainage system leading to STP.
- The STPs have been performing smoothly and deliver effluents with BOD values below 10 mg/l. Likewise, all other listed parameters are also complied with. Monthly analysis reports are regularly generated.

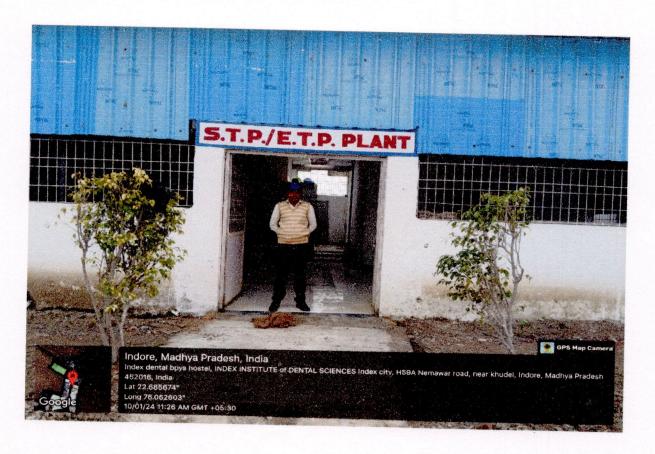


Photo: Sewage Treatment Plant (500 KLD)

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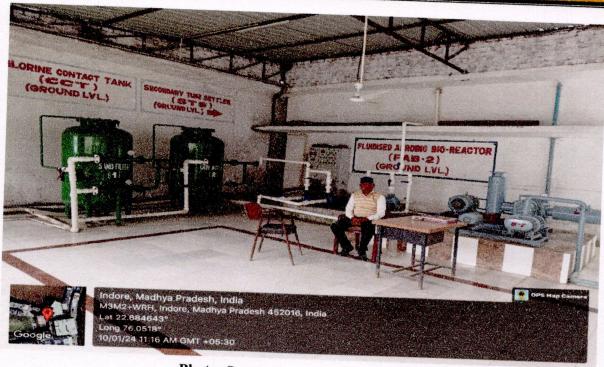
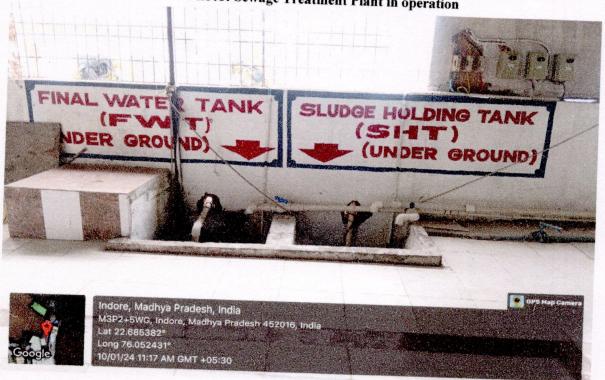
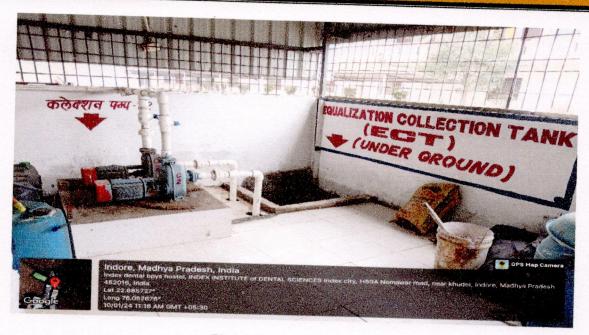


Photo: Sewage Treatment Plant in operation



**Photo: Sewage Treatment Plant** 





**Photo: Sewage Treatment Plant** 

#### Recycle and Re-use of Treated Waste Waters:

In general, the STPs are operated at not more than 80% of the designed capacity and at much lower capacity during vacations, lock down etc. The treated waste waters from STP is utilized for the following activities;

- i) Gardening and maintaining greenery within the campus.
- ii) For construction and curing activities within the campus.
- iii) Secondary flushing in toilets in the hostel buildings.
- iv) Buses and other vehicles washing within the campus.





Photo: - (Sprinkler) Use of Recycle water for Gardening

#### 4. Construction of Tanks and Bunds:

As the water crisis continues to become severe, there is a dire need of reform in water management system and revival of traditional systems. The institution built water storage tank, to collect the water and can be used whenever it is required.





Photo: Tank to Store Rain Water

### 4. Maintenance of water bodies and distribution system in the campus

The ground water is pumped into storage tanks located at different places in the campus. There are few numbers of overhead storage tanks. The water is distributed through well laid pipe network. Drinking water after treating in RO plant is supplied through a separate set of distribution pipes and water for all other purpose is supplied through another set of distribution pipes. Entire distribution system is well supervised by Civil works people to ensure that there are no leakages and wastages of precious water through joints, valves etc. Waste usage of water is reduced using low pressure flushes. All the stakeholders of the college are well educated to use water economically and efficiently.

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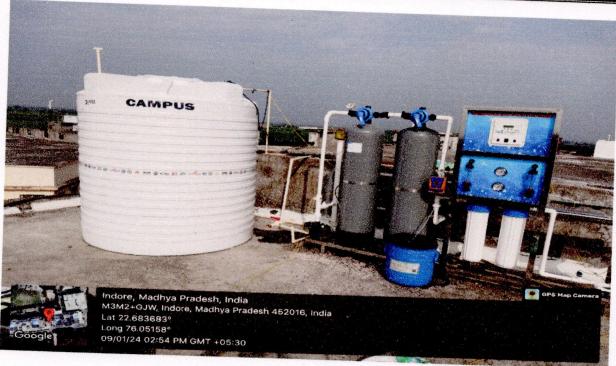


Photo: RO plants in Campus Building



Photo: Over Head Tank in the campus building



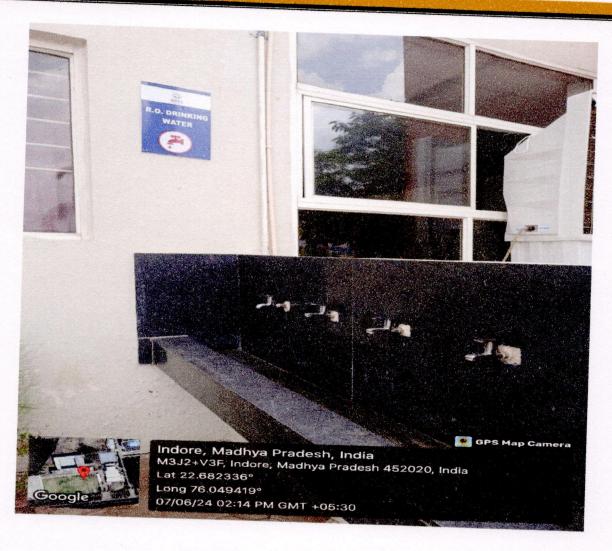


Photo: (RO) Drinking water Facilities

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Photo: Underground water Storage Tank in the Campus