



Anjuman-I-Islam's
**INSTITUTE OF HOSPITALITY
MANAGEMENT**



WATER AUDIT

**PREPARED BY
QUALITY CARE ALLIANCE**

Auditing for Water Management at AIIHM Mumbai

Water is a natural resource which is an essential resource for all life in the planet. It is observed that on earth only three percent of it is fresh and two-thirds of the freshwater is locked up in ice caps and glaciers.

Water Management Activities

Water auditing is conducted for the evaluation of facilities of raw water intake and determining the facilities for water treatment and reuse. The concerned auditor investigates the relevant method that can be adopted and implemented to balance the demand and supply of water (Senior and Brightman, 2015).

AIIHM Mumbai is taking enough attempt to manage wastewater that are coming out from various Departments and laboratories. In general, water management activities are very important in terms of conserving water and its resources for future generations which in turn useful to reduce the land contamination.

An advisory committee may be constituted to guide the initiative on water conservation.

- Physical Appearance and Overall Ambience on Water Conservation
- Adequacy of Water
- Plumbing adequacy of water taps and sanitary fixtures
- Water Efficient Toilets
- Dedicated Staff for Water Maintenance & Inspection
- Periodic mending and repairs of leaks in taps and pipes
- Two levels of flushing in all the toilets
- Planting indigenous variety of plants and less water requiring plants
- Organizing water conservation workshops to the faculty and students on the campus

Water Quantity Estimation

The quantity of water required for municipal uses for which the water supply scheme has to be designed requires following data:

Water consumption rate (Per Capita Demand in litres per day per head)

Population to be served.

Quantity = Per capita demand x Human population

Water Consumption Rate

It is very difficult to precisely assess

the quantity of water demanded by the public, since there are many variable factors affecting water consumption by various stakeholders of an organization. The various types of water demands, which a city may have, may be listed into following classes:

Water Consumption for Various Purposes at AIIHM Mumbai

S.No	Types of Consumption	Normal Range (lit/capita/day)	Average	Percentage
1.	Domestic Consumption	65-300	160	35
2.	Consumption in Laboratories	45-450	135	30
3.	Public Uses including Fire Demand	20-90	45	10
4.	Losses and Waste as routine consumption	45-150	62	20
5.	Daily use (Day-to-day use)	20-40	15	05

Estimation of Water requirements for drinking and domestic use

(Source: National Building Code 2016 BIS)

As a general rule the following rates per capita per day may be considered for domestic and non-domestic needs. For Communities with population 20,000 to 10,000 together with flushing the per capita per day rates may be considered for domestic and non-domestic needs.

100 to 135 lphd (135- Avg) system.

Water requirements calculation

S.No	Educational Institutions water requirements	Domestic use (lphd)	Flushing (lphd)	Total use (lphd)
1.	Without Boarding Facility	25	20	45
2.	With Boarding Facility	90	45	135