KARUNYA INSTITUTE OF TECHNOLOGY AND SCIENCES

KITS/MWRP/2025/01

Maximizing Water Reuse Policy

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PREAMBLE

Karunya Institute of Technology and Sciences (KITS) recognizes sustainable water management and water reuse as critical imperatives for environmental stewardship and resource resilience. In alignment with its Vision and Mission, the Institute is committed to maximizing water reuse, minimizing freshwater consumption and integrating circular water management principles throughout all academic, administrative and residential functions.

This policy supports national and international frameworks such as the National Water Policy (2012), Central Pollution Control Board (CPCB) standards, UGC Guidelines, AICTE Sustainability Framework, ISO 14001 and UN Sustainable Development Goals (SDG 6: Clean Water and Sanitation, SDG 12: Responsible Consumption and Production, and SDG 13: Climate Action).

ALIGNMENT WITH NATIONAL AND INTERNATIONAL FRAMEWORKS

This Maximizing Water Reuse Policy is aligned with the following constitutional provisions, national directives, regulatory guidelines, accreditation requirements, and international frameworks:

Constitution of India

- Article 47: Places responsibility on the State to improve public health, which includes ensuring safe and adequate water availability.
- Article 51A (g): Fundamental duty of every citizen to protect and improve the natural environment, including air, water, and forests.

Government of India and Regulatory Frameworks

- National Water Policy (2012) – Promotes conservation, minimization of wastage, and adoption of integrated water resources management.
- National Water Mission (under National Action Plan on Climate Change, NAPCC) – Targets 20% reduction in water use through efficiency and reuse.
- Central Pollution Control Board (CPCB) Guidelines – Standards for sewage treatment, treated water quality (Biochemical Oxygen Demand [BOD], Chemical Oxygen Demand [COD], Total Suspended Solids [TSS]) and safe reuse.
- Bureau of Indian Standards (BIS) Water Codes – IS 10500: Specification for Drinking Water, IS 2470: Code of Practice for Installation of Septic Tanks, IS 1172: Code of

Basic Requirements for Water Supply, Drainage, and Sanitation, for water quality, sanitation and building water supply norms.

- Central Ground Water Board (CGWB) Norms – Mandatory rainwater harvesting and groundwater recharge in educational institutions.
- Ministry of Jal Shakti: Jal Shakti Abhiyan – Promotes water conservation, rejuvenation of water bodies and reuse.
- Tamil Nadu Pollution Control Board (TNPCB) Regulations – Compliance with treated water reuse and discharge standards.
- Energy Conservation Building Code (ECBC) – Water efficiency requirements for institutional buildings.

Accreditation, Quality and Higher Education Frameworks

- National Education Policy (NEP 2020): Emphasizes environmental responsibility, sustainability, and resource efficiency in educational institutions.
- NAAC Manual: Criterion 7 (Institutional Values and Best Practices) - Requires water conservation, wastewater treatment and sustainable campus practices.
- AICTE Approval Process Handbook: Green & Sustainability Requirements - Mandates rainwater harvesting, STP reuse, and water audits.
- ISO 14001:2015: Environmental Management Systems - Encourages resource conservation, lifecycle management, and continual improvement.
- ISO 46001:2019: Water Efficiency Management Systems - Recommends water-use monitoring, efficiency targets, and reuse strategies.

International and UN Frameworks

- UN Sustainable Development Goals (SDGs):
  - SDG 6: Clean Water and Sanitation: Improve water quality, increase recycling, and promote water-use efficiency.
  - SDG 12: Responsible Consumption and Production: Promote sustainable resource management and circular systems.
  - SDG 13: Climate Action: Strengthen resilience to climate-induced water stress.
  - SDG 11: Sustainable Cities and Communities: Sustainable and efficient water infrastructure.
- UNESCO Education 2030 Framework for Action: Integrates sustainability and environmental stewardship in education.
- UN Environment Programme (UNEP) Water Frameworks: Supports nature-based solutions and water circularity.
- UI GreenMetric World University Rankings: Includes Water Indicators on conservation, reuse, and RWH.

LEGAL AND POLICY BASIS

The Policy derives authority from:

- The Constitution of India
- National Water Policy (2012)
- Central Pollution Control Board (CPCB) Regulations
- Bureau of Indian Standards (BIS) – Water Management Standards

- Central Ground Water Board (CGWB) Directions
- Ministry of Jal Shakti Notifications and Orders
- UGC Guidelines
- AICTE Green & Sustainability Mandates
- ISO 14001 and ISO 46001 Principles
- Institutional Code of Conduct and Campus Sustainability Guidelines

RATIONALE

Growing water scarcity and rising demand in higher education institutions make water reuse essential. KITS acknowledges its role in promoting responsible water use by:

- National Mandates: Aligning with the National Water Mission, CPCB guidelines and State Water Resources Authority norms.
- Resource Optimization: Reducing freshwater dependency for landscaping, sanitation, laboratories and cooling systems.
- Environmental Responsibility: Minimizing wastewater discharge through decentralized treatment and reuse.
- Innovation & Leadership: Promoting research in water purification, treatment technologies, and circular water systems.
- Community Impact: Extending water-sustainable practices to surrounding communities.
- Green Infrastructure: Incorporating water-efficient design (Indian Green Building Council, IGBC/ Green Rating for Integrated Habitat Assessment, GRIHA standards) in all new construction.

EXECUTIVE SUMMARY

This policy outlines KITS's commitment to achieving maximum water reuse and creating a zero-wastewater-discharge campus by 2035.

Key highlights:

- Full compliance with UGC, AICTE, CPCB, BIS standards, ISO 14001, and UN SDG 6.
- 100% reuse of treated wastewater for gardening, flushing, cooling towers and construction by 2030.
- Mandatory installation of STP, greywater recycling units, rainwater harvesting and IoT-based water monitoring.
- Annual water audits and transparent reporting mechanisms.
- Behavioral change programs for students, faculty and staff.
- Dedicated Water Management Committee for monitoring, evaluation and improvement.
- Integration of water sustainability into curriculum and research.

PURPOSE AND SCOPE

Purpose:

This policy aims to:
Maximize reuse of treated wastewater and greywater.

1. Minimize freshwater dependence for non-potable applications.
2. Achieve a circular and sustainable institutional water system.
3. Create awareness and behavioural transformation among stakeholders.
4. Comply with national regulatory frameworks and global sustainability goals.

Scope:

Applies to:
All academic, administrative, residential and community facilities.

- All students, faculty, staff, vendors and contractors.
- All water-related operations including treatment, distribution, reuse and monitoring.

DOCUMENT CONTROL & REVISION HISTORY

Policy Title	Maximizing Water Reuse Policy
Reference Number	KITS/MWRP/2025/01
Version	1.0
Issue	02
Policy Created on	July 2012
Revision History	Revised on 29th August 2025 (28th IQAC Meeting).
Responsible Executives	Vice-Chancellor, Director (QAA) and Chief Engineer
Responsible Office	Chief Engineer's office & Internal Quality Assurance Cell (IQAC)
Policy Review Frequency	Policy shall be reviewed every three years, or earlier if required by UGC, AICTE or other regulatory authorities.

The policy is described in the following articles

ARTICLE 1

STATEMENT OF POLICY

KITS commits to developing a water-resilient campus through:

- Zero Wastewater Discharge Goal: Achieve complete reuse of treated wastewater by 2035.
- Integration across Operations: Water reuse shall be mandatory across hostels, academic blocks, laboratories, and landscaping.
- Infrastructure Enhancement: STP upgrades, greywater reuse systems, rainwater harvesting, and smart meters.
- Transparency: Publish annual water sustainability reports.
- Financial Commitment: Allocate dedicated resources for water reuse technology, treatment systems, and capacity-building.

ARTICLE 2

POLICY OBJECTIVES

The policy aims to:

- Reduce freshwater consumption by 50% by 2030.
- Achieve 100% reuse of treated wastewater for non-potable purposes.
- Promote ongoing water conservation awareness programs.
- Strengthen monitoring through IoT, smart sensors, and real-time dashboards.
- Ensure water-efficient design in all new buildings (GRIHA/IGBC).
- Integrate water reuse topics in teaching, research, and community outreach.

ARTICLE 3

POLICY PRINCIPLES

3.1 Water Conservation

- Install water-efficient fixtures (low-flow taps, dual-flush toilets).
- Conduct periodic water audits and fix leakages immediately.
- Green procurement for water-efficient fixtures and appliances.

3.2 Wastewater Treatment & Reuse

- Operate STPs at full capacity.
- Treat sewage to CPCB Class-A standard for reuse in gardening, flushing, and cooling.
- Establish decentralized greywater recycling units.

3.3 Rainwater Harvesting (RWH)

- Mandatory RWH structures in all buildings.
- Real-time monitoring of groundwater recharge.

3.4 Green Infrastructure

- GRIHA/IGBC-compliant design for all new buildings.
- Storm water reuse and percolation pits across campus.

3.5 Awareness & Training

- Water conservation campaigns, student clubs, and faculty development programs.

3.6 Community Outreach

- Promote water harvesting and reuse practices in neighbouring villages.
- Conduct rural water literacy programs.

3.7 Transparency

- Annual water sustainability reports published and reviewed by IQAC.

ARTICLE 4

ROLES & RESPONSIBILITIES

4.1. Vice-Chancellor

- Provides leadership for achieving “Zero Wastewater Discharge by 2035”.

4.2. Registrar

- Ensures policy compliance and documentation maintenance.

4.3. IQAC

- Prepares annual water audit reports, maintains compliance, and updates performance benchmarks.

4.4. Chief Engineer

- Oversees STP, RWH, greywater reuse, pipeline networks, and smart water systems.
- Ensures contractors use water-efficient methods.

4.5. Finance Officer

- Allocates budget for water reuse infrastructure and monitoring systems.

4.6. Water & SDG-6 Team

- Conducts water audits, sampling, and reuse performance tracking.
- Maintains dashboards and reports.

4.7. Faculty & Students

- Participate in training, research, water clubs, and project-based learning.

4.8. Contractors & Vendors

- Comply with KITS green procurement and water-efficiency standards.

ARTICLE 5

MONITORING & EVALUATION

5.1 Identification of Deficiencies

- Through audits, IoT sensors, and stakeholder feedback.

5.2 Reporting

- Quarterly water management reports submitted to IQAC.

5.3 Corrective Actions

- Issues classified as minor, major, or critical; timelines assigned.

5.4 Outcomes & Documentation

- All actions recorded in the Water Reuse Performance Register.

5.5 Financial Planning

- Institutional water management budget reviewed annually.

5.6 Review & Continuous Improvement

- Reviewed every three years based on PDCA cycle.

ARTICLE 6

APPEALS PROCESS

- Appeals addressed to Registrar within 10 working days.
- Resolutions provided within 15 days.
- Full confidentiality and non-retaliation assured.

ARTICLE 7

VIOLATIONS

- Students: Counselling/warnings for water misuse.
- Staff/Faculty: Retraining or disciplinary action.
- Contractors: Penalties/blacklisting for non-compliance.
- Severe Violations: Escalated to statutory bodies.
- Non-retaliation: Whistle-blowers protected.

ARTICLE 8

POLICY REVIEW AND CONTINUOUS IMPROVEMENT

8.1 Review Frequency

- The Maximizing Water Reuse Policy shall be formally reviewed once every three years, or earlier if required by UGC, AICTE, CPCB, ISO, State Water Resources Authority, or other statutory bodies.
- The review shall be coordinated by the Internal Quality Assurance Cell (IQAC) in consultation with the Water & SDG-6 Team.

8.2 Performance Evaluation

Continuous monitoring shall be conducted using smart water meters, IoT sensors, STP performance dashboards, groundwater recharge logs, and reuse ratio indicators.

Key Performance Indicators (KPIs) shall include:

- Percentage of treated wastewater reused
- Freshwater reduction percentage per capita
- Rainwater harvesting capacity utilization
- STP efficiency (BOD/COD compliance)
- Greywater recycling performance

8.3 PDCA-Based Continuous Improvement

KITS shall adopt the Plan–Do–Check–Act (PDCA) cycle to ensure ongoing enhancement of water reuse systems and practices:

- PLAN: Set annual water reuse targets, design interventions, allocate resources.
- DO: Implement system upgrades, awareness campaigns, and operational improvements.
- CHECK: Evaluate water audit results, STP efficiency reports, IoT dashboards, and feedback data.
- ACT: Modify strategies, upgrade infrastructure, refine procedures, and introduce innovations based on findings.

8.4 Benchmarking

The institution shall benchmark water reuse performance against:

- National Green Campus Rankings (MHRD/UGC)
- UI GreenMetric indicators
- QS Sustainability Metrics
- THE Impact Rankings: SDG 6 (Clean Water and Sanitation)
- National Sustainable Campus Guidelines

8.5 Stakeholder Involvement in Review

Faculty, students, administrative units, contractors, and external experts shall be consulted to gather feedback and recommend improvements.

8.6 Corrective Action Mechanism

- Identified gaps shall be categorized as minor, major, or critical, with appropriate corrective timelines.
- Corrective measures may include infrastructure upgrades, retraining, process redesign, or procurement modifications.
- All corrective actions shall be recorded in the Water Reuse Performance Register and verified in subsequent audits.

8.7 Transparency and Accountability

- An Annual Water Sustainability Report shall be published and made available to the campus community.
- The report shall summarize consumption trends, reuse capacity, compliance status, KPIs, corrective actions, and future improvement goals.

ARTICLE 9

EMERGENCY PREPAREDNESS AND CONTINGENCY MANAGEMENT

KITS shall establish a robust emergency preparedness system to ensure continuity of water reuse operations, minimize disruptions, and protect the health and safety of all stakeholders during unforeseen events affecting water systems.

9.1 Purpose

This section aims to:

- Ensure uninterrupted water supply and reuse operations during emergencies.
- Protect treated water quality and prevent contamination risks.
- Provide clear procedures and responsibilities for responding to water-related incidents.
- Maintain compliance with CPCB, TNPCB, BIS and institutional safety standards.

9.2 Types of Water-Related Emergencies

Emergencies covered under this policy include, but are not limited to:

- STP Failure or Breakdown
    - Mechanical/electrical failure of aerators, pumps, blowers, filters
    - Malfunctioning of sensors or monitoring systems
    - Blockages in inlet or outlet pipelines
- Water Contamination Incidents
    - Treated water failing BOD/COD/TSS standards
    - Pathogen contamination
    - Chemical spills entering water systems
- Greywater System Malfunctions
    - Blockage or overflow in greywater lines
    - Failure of decentralized treatment units
- Power Outage Affecting Water Treatment Operations
    - Extended electricity failure affecting STPs, pumps, UV units
- Rainwater Harvesting (RWH) Emergencies
    - Overflow of recharge structures
    - Flooding due to blocked gutters or first-flush systems
- Pipeline Leakage or Rupture
    - Loss of treated water
    - Risk of contamination or mixing with untreated wastewater
- Natural or Environmental Disasters
    - Floods, storms, seasonal water scarcity, drought conditions

9.3 Emergency Response Procedures

A. Immediate Response (First 0–2 Hours)

- Shut down affected equipment to prevent damage or contamination.
- Isolate faulty sections of pipelines or treatment units.
- Switch to backup systems, including reserve treated water tanks or alternate water sources.

Report incident to:

- Chief Engineer
- Water & SDG-6 Team
- Registrar (if major incident)

B. Short-Term Response (Within 24 Hours)

- Conduct a rapid assessment to identify cause and extent of the issue.
- Deploy maintenance teams for immediate repair.
- Conduct preliminary water quality testing (pH, turbidity, BOD, COD, TSS).
- Document the incident in the Emergency Action Logbook.

C. Long-Term Stabilization (Within 72 Hours)

- Perform complete system inspection and recalibration.
- Conduct lab-level water analysis to ensure CPCB Class-A compliance.

- Restore all processes (aeration, filtration, UV/chlorination).
- Update Water Reuse Performance Register with incident closure details.

9.4 Preventive & Backup Measures

KITS shall maintain the following to ensure preparedness:

- Backup power supply (generators/inverters) for all STP and pumping operations.
- Redundant pumps/blowers for critical systems.
- Spare parts inventory for aerators, valves, motors, sensors, and diffusers.
- Reserve treated water storage tanks for emergency distribution.
- Regular desilting and cleaning of RWH structures.
- Annual emergency mock drills for STP and water reuse systems.

9.5 Roles and Responsibilities

Chief Engineer

- Lead emergency response operations.
- Approve system shutdowns and restarts.
- Coordinate with external agencies if required.

Water & SDG-6 Team

- Monitor compliance and quality standards.
- Conduct water testing and incident evaluation.
- Maintain emergency documentation.

STP Operators & Maintenance Staff

- Execute on-ground emergency procedures.
- Ensure shutdown/start-up sequences follow SOP.
- Record all actions in the Emergency Action Logbook.

Registrar

- Oversee reporting of major incidents and ensure statutory notifications.
- Communicate with regulatory agencies if required.

Faculty, Staff & Students

- Report leaks, overflows, contamination, or abnormalities immediately.
- Support emergency communication as instructed.

9.6 Emergency Communication System

KITS shall maintain:

- A centralized emergency contact list (STP operators, Chief Engineer, Registrar, IQAC).
- WhatsApp/SMS/email alert groups for rapid dissemination of warnings.
- Signage and safety instructions near STP, RWH units, and greywater systems.

9.7 Post-Incident Review and Reporting

After every major incident, the following shall be completed:

Incident Review Report

- Cause analysis
- Actions taken
- Restoration timeline
- Recurrence prevention measures

Corrective and Preventive Action

- Infrastructure upgrades
- SOP revisions
- Staff retraining

Policy Update Recommendation

- IQAC to suggest revisions if the incident indicates systemic gaps.

References

1. Constitution of India (CoI) [https://www.indiacode.nic.in/bitstream/123456789/16124/1/the_constitution_of_india.pdf]
2. National Water Policy (2012): Ministry of Jal Shakti, Government of India
3. Central Pollution Control Board (CPCB): Guidelines for Sewage Treatment Plant (STP) and Treated Wastewater Reuse
4. Bureau of Indian Standards (BIS): IS 10500: Drinking Water Specification, IS 2470: Code of Practice for Installation of Septic Tanks, IS 1172: Water Supply for Buildings
5. UGC Green Campus Guidelines (2023): University Grants Commission
6. AICTE Approval Process Handbook (Sustainability Requirements): All India Council for Technical Education
7. ISO 14001:2015 – Environmental Management Systems: International Organization for Standardization
8. ISO 46001:2019 – Water Efficiency Management Systems: (Recommended standard for institutional water efficiency planning)
9. UN Sustainable Development Goals – SDG 6, 12, and 13: United Nations
10. National Mission on Water (NWM): Ministry of Jal Shakti, under National Action Plan on Climate Change (NAPCC)
11. State Pollution Control Board (TNPCB): Untreated and treated wastewater discharge norms
12. IGBC and GRIHA Green Building Standards: Indian Green Building Council, Green Rating for Integrated Habitat Assessment
13. Manual on Sewerage and Sewage Treatment (CPHEEO): Central Public Health & Environmental Engineering Organisation

Definitions

- Water Reuse: Use of treated wastewater or greywater for non-potable applications.
- Greywater: Water from washbasins, showers, kitchen sinks.
- Treated Wastewater: STP-processed water meeting CPCB Standards.

- Zero Wastewater Discharge: No wastewater leaving campus boundaries.
- Rainwater Harvesting: Capturing and storing rainwater for reuse or recharge.
- Water Audit: Systematic review of water usage and efficiency.

ANNEXURE I – WATER REUSE PERFORMANCE INDICATORS (KPIs)

Category	Key Performance Indicator (KPI)	Target
Freshwater Reduction	Per capita freshwater use (L/day)	30% reduction by 2030
STP Performance	BOD < 10 mg/L, COD < 50 mg/L (CPCB Class-A)	100% compliance
Wastewater Reuse	% of treated wastewater reused on campus	100% by 2035
Rainwater Harvesting	RWH capacity utilization (%)	≥ 75% annually
Greywater Recycling	Greywater reuse in hostels (%)	≥ 60% by 2030
Loss Prevention	Water loss due to leakages (%)	< 5%
Smart Monitoring	IoT-based meter installation (%)	100% by 2028
Awareness	Students trained per year	≥ 2,000
Cost Efficiency	Cost savings due to reuse	Annual improvement

ANNEXURE II

ALIGNMENT WITH NATIONAL, GLOBAL AND GOVERNMENT FRAMEWORKS

Karunya Institute of Technology and Sciences (KITS) ensures that the Maximizing Water Reuse Policy aligns with relevant national policies, global sustainability frameworks, statutory norms, and government missions. The following table outlines the direct relationships:

A. Alignment with National Frameworks (India)

National Framework / Policy	Key Requirement	Alignment with KITS Water Reuse Policy
National Water Policy (2012)	Promote conservation, minimize wastage, adopt reuse technologies	KITS prioritizes treated wastewater reuse, greywater recycling, and water-efficient infrastructure
National Water Mission (Under NAPCC)	Reduce water use by 20%; promote integrated water resource management	Annual water audits, IoT monitoring, and KPIs for freshwater reduction
CPCB Guidelines for STPs	Treated wastewater must meet Class-A/B norms	STP SOPs ensure BOD, COD, TSS compliance and quality monitoring
Central Groundwater Board (CGWB) Norms	Mandatory rainwater harvesting and groundwater recharge in institutions	RWH structures across campus; recharge wells and percolation trenches
AICTE Sustainability Framework	Water conservation and green campus initiatives	Greywater reuse, RWH, audits integrated into campus operations

UGC Guidelines	Encourage water-efficient campus design and student awareness	Water clubs, green literacy, and community outreach
Energy Conservation Building Code (ECBC): Water Efficiency Section	Efficient plumbing, reduced consumption, reuse systems	Low-flow fixtures, dual-flush systems, sensor-based taps
ISO 14001: Environmental Management)	Lifecycle-based resource conservation	Water reuse integrated into EMS, internal audits & reviews
ISO 46001: Water Efficiency Management System	Setting targets, achieving efficiency, continuous improvement	PDCA cycle, reuse targets, annual performance reporting

B. Alignment with State-Level Guidelines (Tamil Nadu)

State Framework	Alignment
TNPCB – Wastewater Standards	KITS adheres to TNPCB's treated water discharge and reuse norms
Tamil Nadu "Water Security Mission"	Enhances water harvesting and reuse
Tamil Nadu Building Rules (RWH Mandate)	Mandatory rooftop RWH systems

C. Alignment with Global Frameworks

Global Framework	Key Requirement	Alignment with KITS Water Reuse Policy
UN SDG 6 (Clean Water & Sanitation)	Improve water quality, increase recycling, water-use efficiency	100% wastewater reuse, audits, RWH, smart metering
UN SDG 12 (Responsible Consumption)	Resource efficiency & circular economy	Circular water model and wastewater-to-resource approach
UN SDG 13 (Climate Action)	Climate-resilient water systems	Reduced demand, lower GHG via efficient water operations
UN SDG 11 (Sustainable Cities)	Sustainable water infrastructure	Green buildings, decentralized greywater systems
Global Water Partnership (GWP) IWRM	Integrated water management	Water audits, risk assessment, monitoring
UI GreenMetric University Ranking – Water Indicator	Water conservation, reuse, RWH, untreated water reduction	IoT monitoring, treated water use & reporting
LEED & GRIHA Water Criteria	Water-efficient buildings & reuse	New constructions compliant with green building standards

D. Alignment with Higher Education & Accreditation Requirements

Accrediting/Regulatory Body	Requirement	KITS Alignment
ABET (Sustainability Outcomes)	Environmental responsibility in campus operations	Demonstrated through water reuse, conservation & reporting
NAAC Quality Benchmarks	Green practices, water management, environment	Annual water audits, sustainability report
AICTE Policy for Environment-Friendly Campus	Water audit, RWH, wastewater reuse	Fully integrated in Water Reuse Policy
Institutional Ranking Bodies	Sustainability metrics	Reuse %, RWH, and efficiency KPIs reported annually

E. Alignment with Community and Government Missions

Mission / Program	KITS Contribution
Swachh Bharat Mission	Wastewater management and community sanitation programs
Jal Jeevan Mission	Water literacy sessions and rural water awareness camps
Atal Mission for Rejuvenation and Urban Transformation (AMRUT)	Efficient water distribution, smart water infrastructure
Smart Cities Mission	IoT-based water metering and monitoring initiatives

ANNEXURE III

ACRONYMS AND ABBREVIATIONS

Acronym	Full Form
AICTE	All India Council for Technical Education
AMC	Annual Maintenance Contract
BIS	Bureau of Indian Standards
BOD	Biochemical Oxygen Demand
COD	Chemical Oxygen Demand
CPHEEO	Central Public Health & Environmental Engineering Organisation
CPCB	Central Pollution Control Board
DO	Dissolved Oxygen
GRIHA	Green Rating for Integrated Habitat Assessment
IGBC	Indian Green Building Council
IoT	Internet of Things
IQAC	Internal Quality Assurance Cell
ISO	International Organization for Standardization
KL	Kilolitres
LPCD	Litres Per Capita Per Day
LPM	Litres Per Minute
MLSS	Mixed Liquor Suspended Solids
MoJS	Ministry of Jal Shakti
NAPCC	National Action Plan on Climate Change

NWM	National Water Mission
PDCA	Plan–Do–Check–Act
QAA	Quality Assurance & Accreditation
RWH	Rainwater Harvesting
SDG	Sustainable Development Goal
STP	Sewage Treatment Plant
TNPCB	Tamil Nadu Pollution Control Board
TSS	Total Suspended Solids
UGC	University Grants Commission
UN	United Nations
UV	Ultraviolet (Disinfection)
WWR	Wastewater Reuse
WMP	Water Management Plan