Bharath Institute of Higher Education and Research
(Deemed to be University)
Office of the Dean of Engineering,
Sree Balaji Institute of Science and Technology (SBIST),
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SBIST/MAINT/REC/2025-26/005 Date: 01 October 2025

OFFICE ORDER

SEWAGE DISPOSAL SYSTEM

(Infrastructure Compliance – AICTE)

Academic Year 2025–26

1. INTRODUCTION

Sree Balaji Institute of Science and Technology (SBIST) has established a scientifically designed Sewage Disposal and Wastewater Management System to ensure hygienic sanitation, environmental sustainability, and regulatory compliance. The system is designed in accordance with:

- AICTE Infrastructure Norms
- NAAC Criterion 4 (Infrastructure & Learning Resources)
- NBA Laboratory & Campus Requirements
- State Pollution Control Board Guidelines
- Environmental Protection Act, 1986

The sewage management system ensures safe collection, treatment, and disposal of wastewater generated from academic buildings, laboratories, administrative blocks, and campus utilities.

2. SOURCE OF WASTEWATER GENERATION

Sewage is generated from:

- Toilets & Sanitary Facilities
- Wash Basins
- Laboratories (non-hazardous discharge)
- Hostel & Mess (if applicable)

- Canteen
- Administrative Block

Hazardous laboratory waste (if any) is treated separately as per safety norms.

3. SEWAGE COLLECTION SYSTEM

The campus includes:

- Underground Sewage Pipelines
- Inspection Chambers
- Manholes at designated intervals
- Proper gradient-based drainage flow
- Ventilation arrangements

The system ensures:

- No stagnation
- No leakage
- Odor control
- Safe transportation to treatment facility

4. SEWAGE TREATMENT SYSTEM

The institution is equipped with:

Sewage Treatment Plant (STP)

- Installed Capacity: _____ KLD (Kilo Litres per Day)
- Treatment Method: (Tick applicable)
    - Activated Sludge Process
    - MBBR
    - SBR
    - Bio-digester
    - Septic Tank with Soak Pit (if small scale)

STP Process Includes:

1. Screening Chamber
2. Equalization Tank
3. Aeration Tank
4. Settling Tank

5. Filtration Unit
6. Disinfection Unit

Treated water quality meets prescribed discharge standards.

5. REUSE & RECYCLING

The institution promotes sustainable practices by:

- Reusing treated water for gardening
- Landscape irrigation
- Toilet flushing (if applicable)
- Dust suppression

This reduces freshwater consumption and supports green campus initiatives.

6. CAPACITY & DESIGN ADEQUACY

The Sewage Disposal System is designed to handle:

- Student population
- Faculty & Staff strength
- Visitors
- Future expansion provisions

Estimated Sewage Generation (Phase 1 – 300 Intake):

Category	**Estimated Sewage (KLD)**
Academic Block	___
Laboratory Block	___
Administrative Block	___
Canteen	___
Total Estimated	___ KLD

The installed STP capacity is adequate for projected campus usage.

7. ENVIRONMENTAL & SAFETY MEASURES

✓ Proper sealing of septic/collection tanks

✓ Regular sludge removal

✓ Periodic water quality testing

✓ Odor control measures

✓ Anti-mosquito treatment

✓ Covered manholes

✓ Proper ventilation

8. MAINTENANCE & MONITORING

Activity	Frequency
STP Inspection	Weekly
Sludge Removal	As required
Pump Maintenance	Monthly
Water Quality Testing	Quarterly
Pipeline Inspection	Annually

Maintenance logbook is maintained and verified.

9. COMPLIANCE WITH REGULATORY NORMS

The Sewage Disposal System complies with:

- AICTE Infrastructure Norms
- NAAC Infrastructure Guidelines
- NBA Environmental Compliance
- State Pollution Control Board Standards
- Local Municipal Regulations

If required, Consent to Operate (CTO) from Pollution Control Board is maintained.

10. RESPONSIBILITY MATRIX

Sl. No.	Designation	Responsibility
1	Dean	Overall Supervision
2	Administrative Officer	Infrastructure Monitoring
3	Civil Engineer	STP Technical Oversight
4	Maintenance Supervisor	Daily Operation
5	Safety Officer	Environmental Compliance

11. DOCUMENTS TO BE MAINTAINED (AICTE / NAAC FILE)

- STP Installation Certificate
- Capacity Approval

- Pollution Control Board Consent (if applicable)
- Water Quality Test Reports
- Maintenance Logbook
- Campus Drainage Layout Plan

12. CONCLUSION

The Sewage Disposal System at SBIST ensures hygienic wastewater management, environmental sustainability, and regulatory compliance. The infrastructure supports a clean and healthy academic environment while promoting responsible water resource management.

The institution remains committed to upgrading its wastewater treatment systems in line with sustainable campus development goals.