Environment Audit Report

SOMAIYA VIDYAVIHAR UNIVERSITY, MUMBAI

Address – Vidyanagar, Vidya Vihar East, Vidyavihar, Mumbai, Maharashtra 400077

Audit Date – 07, 08, 09 July 2025

Audit Conducted by

M/S Quality Asia Certifications Private Limited

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Table 1 List of Abbreviations

BMW	Biomedical Waste
CTE	Consent to Establish
CTO	Consent to Operate
SVU	Somaiya Vidyavihar University
NABET	National Accreditation Board for Education and Training
RWH	Rainwater Harvesting
STP	Sewage Treatment Plant
L	Liters
KLD	Kilolitre per Day
Kg	Kilogram
LED	Light-emitting diode
PVC	Photovoltaic cell

1. CHAPTER 1: INTRODUCTION

1.1.ABOUT UNIVERSITY

Somaiya Vidyavihar University (SVU) is Mumbai's first self-financed State Private University, established in 2019. Its sponsoring body, Somaiya Vidyavihar, has an 82-year legacy in education. Recognized by the University Grants Commission (UGC) and a member of the Association of Indian Universities (AIU), SVU successfully completed its first cycle of National Assessment and Accreditation **(NAAC) with an A grade**, valid until 12th February 2030.

Founded by **Padmabhushan K. J. Somaiya** in 1959 with the motto **"Knowledge Alone Liberates,"** the university spans **28.08 acres within a 49.16-acre green campus.** It offers education across multiple disciplines, including **Engineering & Technology, Education, Science, Dharma Studies, Humanities & Social Sciences, Commerce & Business Studies, Management Studies, and Music & Performing Arts.**

SVU provides a wide range of **Undergraduate, Postgraduate, and Doctoral programs**, designed to encourage interdisciplinary learning through minor and honors programs, fully aligned with the **National Education Policy (NEP).** The university also fosters entrepreneurship and innovation through its award-winning incubation centers—**Research Innovation Incubation Design Laboratories (riidl)** and **BioRiiDL**—supported by **DST, DBT-BIRAC (Government of India), and MSInS (Government of Maharashtra).**

Notable Achievements:

- **K. J. Somaiya Institute of Management (KJSIM)**, established in 1981, holds the **coveted AACSB accreditation** and has been recognized among the **top 25 business schools across India.** It also secured **45th rank in NIRF 2023.**
- **K. J. Somaiya College of Engineering (KJSCE)**, established in 1983, attained autonomous status in 2014 and received NAAC accreditation with an **A grade in 2017.**
- **K. J. Somaiya College of Education**, established in 1990, became **Maharashtra's first autonomous College of Education** and has been accredited thrice by NAAC with an A grade.
- **K. J. Somaiya Institute of Dharma Studies**, established in 2020, hosts the **Indian Knowledge System Centre** under the **Ministry of Education, Government of India.**

SVU continues to expand with the **School of Design, School of Music, Sports Academy, and Somaiya Institute of Research and Consultancy**, strengthening its commitment to **education, research, and consultancy.**With a mission to **nurture excellence**, the university provides an environment of **academic freedom**, fostering **creativity,**

innovation, leadership, responsible citizenship, and holistic growth. SVU empowers students to follow their passions and realize their full potential.

Institutional Infrastructure

The university campus comprises a diverse array of institutions and facilities, including:

- K J Somaiya School of Engineering (Aryabhat & Bhaskaracharya Buildings)
- K J Somaiya Institute of Management (SIMSR & Chanakya Buildings)
- Dr. Shantilal K. Somaiya School of Commerce and Business Studies (Aurobindo Building)
- Somaiya School of Humanities and Social Sciences (Aurobindo Building)
- Somaiya School of Basic and Applied Sciences (6th Floor, Bhaskaracharya Building)
- K J Somaiya School of Education (6th Floor, Bhaskaracharya Building)
- K J Somaiya Institute of Dharma Studies (4th Floor, SIMSR Building)
- Somaiya Sports Academy (Eklavya Sports Complex)
- Somaiya School of Design (5th Floor, Bhaskaracharya Building)
- Somaiya Institute of Research and Consultancy (Madhuban)
- Maya Somaiya School of Music and Performing Arts (Vinaymandir)
- Department of Library and Information Science (4th Floor, Bhaskaracharya Building)
- Administrative Building (Under Construction)
- Sanskriti Vihar Building (Under Construction)

In addition, shared facilities such as the Project Office, Welcome Centre, Biogas Plant, Solar Operated Vehicles, Solar Street Lights, Vermicomposting Unit, IT Department, Mess, EV Charging Station, Campus Gardens, Canteens, Borewells, and Water Storage Tanks were also considered as part of the audit.

Hostel Details

The following hostels were included in the scope of the environmental audit:

1. **Sandipani Hostel** – Fully managed by SVU, with independent utilities and covered under this audit.

2. **Maitreyi Hostel** – Fully managed by SVU, with electricity and water usage records submitted for this audit.

3. **Polytechnic Hostel (Shared Facility)** – While the Polytechnic College does not fall under the purview of SVU, this hostel is a shared residential facility where some SVU students are accommodated.

    - **Note:** Electricity and water bills for the Polytechnic Hostel were not submitted during this audit because they are combined with the Polytechnic College infrastructure. Only occupancy-related environmental observations have been included in this report, and no Polytechnic College-specific infrastructure details are covered.

These hostels were reviewed for their environmental performance with respect to energy usage, water consumption, waste management, and compliance with health, safety, and hygiene standards.

Shared Facilities Within Campus

In addition to the academic buildings, hostels, and administrative blocks, the environmental audit also covered the shared facilities within the **Somaiya Vidyavihar University, Mumbai (SVU)** campus. These facilities support the university's sustainability objectives and campus operations.

The following shared facilities were included in the audit scope:

- **Project Office** – Central administrative and project coordination hub.
- **Welcome Centre** – Main entry point for visitors and administrative interactions.
- **Biogas Plant** – Operational plant for organic waste treatment and renewable energy generation.
- **Solar Operated Vehicles** – Campus transport facility running on solar power to reduce carbon footprint.
- **Solar Street Lights** – Energy-efficient lighting installed across major roads and walkways in the campus.
- **Vermicomposting Unit** – Organic waste treatment facility producing compost for landscaping and gardens.
- **IT Department** – Centralized IT infrastructure supporting campus operations.
- **Campus Mess and Canteens** – Facilities reviewed for waste management and energy efficiency.
- **EV Charging Stations** – Installed to support sustainable mobility and electric vehicle adoption.

- **Gardens and Green Zones** – Key landscaped areas including Nakshatra Garden, Founders' Garden, and Butterfly Garden, supporting biodiversity and carbon sequestration.
- **Borewells and Water Storage Tanks** – Infrastructure for water supply and conservation across the campus.

These shared facilities play a crucial role in the university's environmental performance and were evaluated for their energy usage, waste management, water conservation, and compliance with environmental sustainability practices.

Global Engagement and Innovation

Somaiya Vidyavihar University maintains active collaborations with international universities, enabling:

- Faculty and student exchange programs
- Joint research and publications
- Immersive learning and cultural exchange
- International internships and placement pathways

An advanced **Innovation & Incubation Centre** supports entrepreneurial ventures and start-up ideas, while a dedicated **Placement Cell** ensures robust career support for graduates. Residential facilities, including safe and inclusive hostels, offer students a nurturing environment conducive to academic and personal growth.

Commitment to Sustainability

The university has also demonstrated a strong commitment to environmental stewardship and sustainable campus development, actively promoting green practices across operations, infrastructure, and student engagement.

1.2.ABOUT QUALITY ASIA CERTIFICATIONS PRIVATE LIMITED

M/s Quality Asia Certifications Private Limited (QACPL) is a leading Management and Environmental Consulting Organization established in 2021. QACPL has emerged as a trusted name in the field of environmental assessment, sustainability audits, and regulatory compliance advisory across India.

The organization is backed by a dedicated team of environmental experts, auditors, and technical professionals possessing in-depth knowledge and practical expertise in diverse environmental domains. QACPL operates with the core objective of promoting sustainable development through systematic evaluation, awareness, and implementation of eco-friendly practices in institutions, industries, and infrastructure projects.

Audit Team for the Current Assignment:

- **Mr. Samarth Suri** – Auditor
- **Ms. Palak Ahuja** – Auditor
- **Mr. Atul Suri** – Technical Reviewer

Both auditors bring valuable experience in assessing campus sustainability, resource efficiency, and eco-campus development initiatives. Their collaborative approach ensures detailed evaluations and actionable recommendations aligned with the client's goals and compliance frameworks.

1.3.ABOUT ENVIRONMENTAL AUDIT AND ITS NEED

Environmental audit is a systematic, documented, and objective evaluation of an organization's environmental performance, practices, and compliance with regulatory norms. It serves as an essential management tool to ensure that institutional operations are aligned with environmental sustainability goals, statutory obligations, and internal environmental policies. The primary purpose of an environmental audit is to identify gaps, encourage eco-efficient practices, and promote continual environmental improvement across the institution.

According to the International Chamber of Commerce (ICC), environmental auditing is:

"A management tool comprising a systematic, documented, periodic, and objective evaluation of how well environmental organization, management, and equipment are performing with the aim of safeguarding the environment and natural resources in its operations/projects."

At **Somaiya Vidyavihar University, Mumbai**, which is spread across a vast green campus in Mumbai, the integration of sustainable development with academic and administrative functions is a key institutional objective. Conducting an environmental audit enables the university to:

- Evaluate its environmental impact across academic, residential, and operational areas.
- Review adherence to environmental regulations and licenses under the Water Act, Air Act, Hazardous Waste Rules, and others.
- Monitor key parameters such as energy use, water consumption, waste generation, and resource optimization.
- Strengthen its Environmental Management System (EMS) aligned with the spirit of ISO 14001 and NAAC's Green Campus criteria.

- Encourage participatory environmental governance involving students, faculty, and administrative staff.

This environmental audit, conducted by Quality Asia, is focused on assessing SVU's current environmental practices and identifying areas for enhancement. The audit emphasizes compliance with environmental laws, implementation of pollution control measures, and the institution's commitment to minimizing its ecological footprint.

1.4.AUDIT OBJECTIVES

The objective of this Environmental Audit is to:

- Evaluate and document the current environmental performance of Somaiya Vidyavihar University, Mumbai.
- Ensure compliance with environmental regulations laid down by statutory authorities such as the Central Pollution Control Board (CPCB), Maharashtra Pollution Control Board (MPCB), and relevant national/state environmental legislations.
- Identify sources of pollution and environmental risks associated with various university activities (academic, residential, administrative, maintenance, waste handling, etc.).
- Assess the efficiency and effectiveness of the implemented environmental management practices including energy usage, water conservation, wastewater treatment, solid waste segregation, green cover maintenance, and carbon footprint mitigation.
- Promote sustainable resource management and recommend measures to improve overall environmental performance.
- Foster a culture of environmental responsibility and awareness among students, staff, and other stakeholders in line with SVU's Green Campus vision.

1.5.AUDIT SCOPE

The scope of the audit covers:

- Entire campus of Somaiya Vidyavihar University, Mumbai, including all academic blocks, administrative buildings, laboratories, libraries, hostels, canteens, sports facilities, parking areas, and residential quarters.
- Evaluation of resource consumption patterns, including water, electricity, and fuel usage.
- Review of solid waste and biomedical waste management, including segregation, disposal, composting, and e-waste handling practices.

- Examination of sewage treatment and wastewater reuse systems.
- Inspection of air quality, noise levels, and vehicular emissions within the premises.
- Verification of legal and regulatory compliances related to the Environment (Protection) Act, 1986, Air (Prevention and Control of Pollution) Act, 1981, Water (Prevention and Control of Pollution) Act, 1974, and Hazardous Waste Rules.
- Assessment of green initiatives, such as tree plantation, solar panel usage, rainwater harvesting, and awareness programs.
- Identification of environmental risks and opportunities for continual improvement in environmental performance.

1.6.DISCLAIMER

This Environmental Audit Report has been prepared by the Environment Audit Team of Quality Asia Certifications based on the information, documents, and data provided by the representatives of Somaiya Vidyavihar University, Mumbai. The observations and conclusions presented herein are the result of an independent and objective assessment carried out by the audit team, using professional judgment and to the best of their technical capability.

While all reasonable efforts have been made to ensure the accuracy and reliability of the data and findings, the report is limited to the scope of information made available and the onsite conditions observed during the audit period. Quality Asia Certifications shall not be held liable for any inadvertent omissions, discrepancies, or decisions taken based on this report without further verification or validation.

2. CHAPTER 2: APPROACH AND METHODOLOGY

2.1.APPROACH & METHODOLOGY

The Environmental Audit of **Somaiya Vidyavihar University (SVU)** was conducted in a structured and systematic manner comprising two key stages:

- **Document Review** – Involving the collection and analysis of relevant documents, records, and prior reports related to the University's environmental practices and compliance status.
- **Onsite Assessment** – Involving physical inspection of various campus facilities, observation of operational practices, interactions with departmental representatives, and verification of the implemented environmental measures.

This report is based on the review of documents submitted by SVU and physical verification carried out by the audit team from Quality Asia Certifications. A compliance evaluation was performed on various parameters to determine whether the applicable requirements were complied with, partially complied, not complied, or not assessed.

The audit team referred to previous audit reports (where applicable), environmental permits, standard operating procedures, and other compliance records. A customized audit checklist was developed and shared with the University to facilitate data collection during the field visit. The audit was conducted in accordance with the environmental regulations and statutory obligations applicable to a higher education institution.

The following table outlines key **acts, rules, and notifications** applicable to the environmental compliance of the University:

Table 2 Key Acts, Rules and Regulations

S. No.	Act / Rule / Notification	Required NOC / Clearance / Annual Return	Concerned Authority
1.	Environment (Protection) Rules, 1986	Submission of Environmental Statement (Form V)	State Pollution Control Board (MPCB)
2.	Water (Prevention and Control of Pollution) Act, 1974	• Consent to Establish • Consent to Operate	State Pollution Control Board (MPCB)
3.	Air (Prevention and Control of Pollution) Act, 1981	• Consent to Establish • Consent to Operate	State Pollution Control Board (MPCB)
4.	Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016	• Hazardous Waste Authorization • Annual Return (Form 4) • Manifest (Form 10)	State Pollution Control Board (MPCB)

S. No.	Act / Rule / Notification	Required NOC / Clearance / Annual Return	Concerned Authority
		• Record maintenance (Form 3)	
5.	E-Waste (Management) Rules, 2016	• Annual Return (Form 3) • Manifest (Form 6) • Record maintenance (Form 2)	State Pollution Control Board (MPCB)
6.	Bio-Medical Waste Management Rules, 2016 (if applicable)	• Authorization • Annual Return (Form 4)	State Pollution Control Board (MPCB)
7.	Solid Waste Management Rules, 2016	Adherence to waste segregation, storage, treatment and disposal norms	State Pollution Control Board (MPCB)

This audit methodology ensures a transparent, evidence-based assessment to guide the University towards continual improvement in environmental performance and compliance.

3. CHAPTER 3: DATA COLLECTION AND ANALYSIS

3.1.ENVIRONMENT MANAGEMENT SYSTEM ASSESSMENT

This Environmental Audit has been conducted in alignment with applicable environmental legislation, regulatory frameworks, and national guidelines relevant to higher educational institutions. The assessment involved evaluation of the University's operational activities, existing environmental infrastructure, and ongoing initiatives aimed at environmental conservation and compliance.

The Environment Management System (EMS) at Somaiya Vidyavihar University includes structured procedures and practices to manage environmental responsibilities effectively. The EMS has integrated environmental considerations into various operational areas including energy use, water consumption, waste disposal, biodiversity preservation, and pollution control.

The following table presents the key activities undertaken by the University, associated environmental aspects, and their corresponding environmental impacts:

Table 3 Environmental Aspect and Impact

S. No.	Activity	Environmental Aspect	Potential Environmental Impact
1.	Operation of diesel generator sets (DG Sets)	Air emissions (Particulate Matter, NOx, CO)	Contribution to air pollution and GHG emissions
2.	Electricity consumption in academic and hostel blocks	Energy usage and dependence on grid power	Indirect GHG emissions and depletion of non-renewable energy
3.	Water consumption in academic and residential areas	Freshwater withdrawal from municipal/borewell sources	Strain on water resources and potential groundwater depletion
4.	Sewage generation and treatment via STP	Wastewater discharge, sludge generation	Soil and water pollution if untreated or mismanaged
5.	Use of chemicals in laboratories and housekeeping	Hazardous waste generation, spillage risk	Soil, water, and occupational health hazards
6.	Solid waste generation from canteens and hostels	Organic and inorganic waste production	Foul odor, pest infestation, and landfill burden
7.	E-waste from IT and electrical equipment	Discarded electronic components	Toxic material leaching and improper disposal risk
8.	Tree plantation and green landscaping	Biodiversity support, carbon sequestration	Positive impact: habitat conservation, improved air quality

9.	Transportation of staff, faculty, and students	Vehicular emissions and traffic load	Air pollution and carbon footprint increase
10.	Biomedical waste generation in medical room	Infectious waste	Risk to human health and environmental contamination

This assessment forms the baseline for evaluating compliance obligations and for identifying areas requiring corrective or preventive actions. The aspects and impacts are further explored in the relevant chapters with supporting evidence and audit findings.

3.2.DATA COLLECTION

In order to audit the legal compliances, all the required documents as per the norms and standards applicable for construction/expansion of the University are listed and collected. Similarly, the existing environmental conditions were examined through the site observations.

3.3.DATA ANALYSIS

3.3.1. DOCUMENT ANALYSIS

The document review process involved examining the University's internal environmental management records, licenses, third-party agreements, monitoring certificates, and statutory submissions. The following key documents were verified:

- Consent to Operate and Establish (Air & Water Acts) issued by MPCB
- Hazardous Waste Authorization and annual return formats
- e-Waste Management Agreement with Ecostar Recycling
- Biomedical Waste Handling records (where applicable)
- Fire NOCs from competent authorities for multiple blocks
- Water quality, air quality, and noise monitoring reports
- Energy audit data and renewable energy generation records
- Solid waste handling procedures and records of dry and wet waste segregation
- Institutional policy on green campus practices and sustainability initiatives

The documents reflect a structured and systematic approach to environmental compliance and sustainable operations. However, suggestions for improved tracking formats and periodic updates were provided during the audit for continual improvement.

3.3.2. MONITORING REPORT

Monitoring activities were reviewed for air quality, noise levels, and water quality across key campus zones. Reports submitted by the Somaiya School of Basic Sciences, Department of Environmental Science, were scrutinized to assess current environmental conditions.

Key highlights include:

- **Noise Monitoring (Report Dated 04/07/2025):** Noise levels were measured at three locations: the Bhaskaracharya Building (6th Floor), Ground level, and the Engineering College Canteen. The observed **Leq dB(A)** levels remained within the prescribed limits of the **Noise Pollution (Regulation and Control) Rules, 2000** for educational and mixed-use zones during daytime hours. Highest readings were observed at the canteen zone, warranting periodic reassessment.
- **Air Quality Monitoring:** Air quality parameters such as Particulate Matter (PM10 and PM2.5), SO_2, and NOx were within permissible limits as per CPCB norms. Monitoring locations near high-traffic zones were also evaluated to identify pollutant concentration trends.
- **Water Quality:** Potable water testing was conducted for drinking water sources on campus. All key parameters—TDS, pH, hardness, microbial count—were found within acceptable limits as per BIS:10500 standards.

The monitoring reports indicate that environmental conditions across the campus are being maintained well within compliance thresholds, with a need for sustained documentation, awareness among stakeholders, and ongoing improvement initiatives.

3.4.ENERGY MANAGEMENT

Energy management at Somaiya Vidyavihar University is structured around the principles of consumption monitoring, operational efficiency, and progressive adoption of renewable energy sources. The University has established a combination of centralized and distributed systems to cater to its diversified needs across academic, residential, and administrative domains.

3.4.1. CONNECTED LOAD AND CONSUMPTION PROFILE

As per the energy audit conducted for the academic year 2024–25, the total connected load across all campus blocks is estimated to be **3,728.48 kW**. This includes energy requirements for:

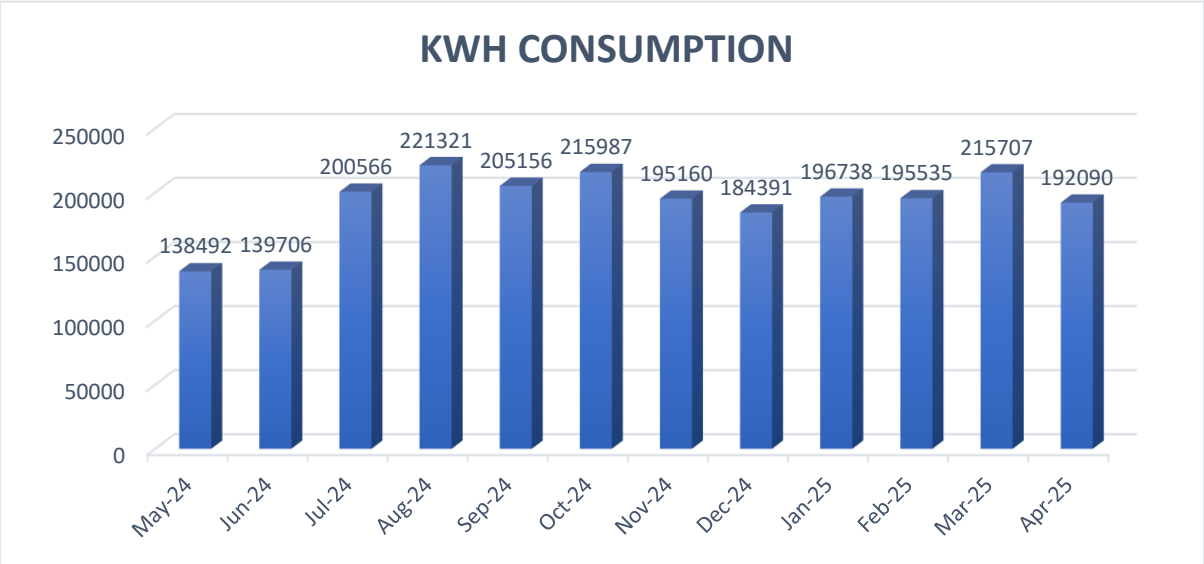
- Academic and administrative facilities
- Residential hostels and faculty/staff accommodations

- Laboratories and technical workshops
- Utilities such as lifts, pumps, HVAC systems, and common area lighting

Note: Bills for Aryabhat, Bhaskaracharya, SIMSR, Chanakya, Sandipani, Maitreyi, Aurobindo, and Eklavya Complex were reviewed during the audit.

The audit findings indicate that the major contributors to energy demand are lighting systems, air conditioning units, water pumping operations, and laboratory equipment. The consumption profile underscores opportunities for intervention through energy-efficient upgrades, particularly in lighting and motor-operated systems.

Figure 1 KWH Consumption



3.4.2. ENERGY EFFICIENCY MEASURES

The University has demonstrated a proactive approach toward reducing energy intensity through implementation of several conservation measures, including:

- **Complete transition to LED lighting** across classrooms, corridors, and hostels
- **Deployment of energy-efficient ceiling fans** in all student and staff accommodations
- **Automation of lighting controls** in shared and unoccupied spaces to eliminate wastage
- **Installation of Variable Frequency Drives (VFDs)** on selected water pumps and ventilation motors
- **Use of star-rated electrical appliances** in guest houses and residential blocks

These interventions have resulted in significant reductions in electricity consumption per capita and per block, establishing a trend toward sustained energy efficiency.

3.4.3. RENEWABLE ENERGY SYSTEMS

The University has actively promoted renewable energy integration on campus. Currently, solar photovoltaic systems with a total capacity of 50 kWp are installed at key buildings, with net-metering infrastructure for grid synchronization. The distribution is as follows:

S.No	Location	Capacity (kW)
1	KJSSC	50

These solar installations not only contribute to energy savings but also support the University's carbon reduction objectives and its transition toward clean energy.

3.4.4. MONITORING AND AWARENESS

To ensure optimal energy performance, energy meters have been installed at all major distribution points and high-load areas. These enable real-time tracking and facilitate regular audits and load profiling for continuous improvement.

The University also organizes periodic awareness campaigns, including Switch-Off Drives, student-led events, and training sessions to foster behavioural change and reinforce the culture of energy responsibility among all stakeholders.

3.5.WASTE MANAGEMENT

3.5.1. SEWAGE TREATMENT PLANT

The STP operates on a zero-energy treatment process, eliminating the need for external power inputs during core treatment stages. This approach not only minimizes the operational carbon footprint but also contributes to cost efficiency and energy conservation.

The treated water from the STP is effectively reused for landscape irrigation and gardening within the campus. This significantly reduces dependency on freshwater sources, particularly during dry seasons, and promotes circular water economy principles.

The STP is integrated into the central sewer network of the university, as shown in the attached campus sewer layout. All major buildings are connected to this system through an underground drainage network that directs wastewater to the treatment facility.

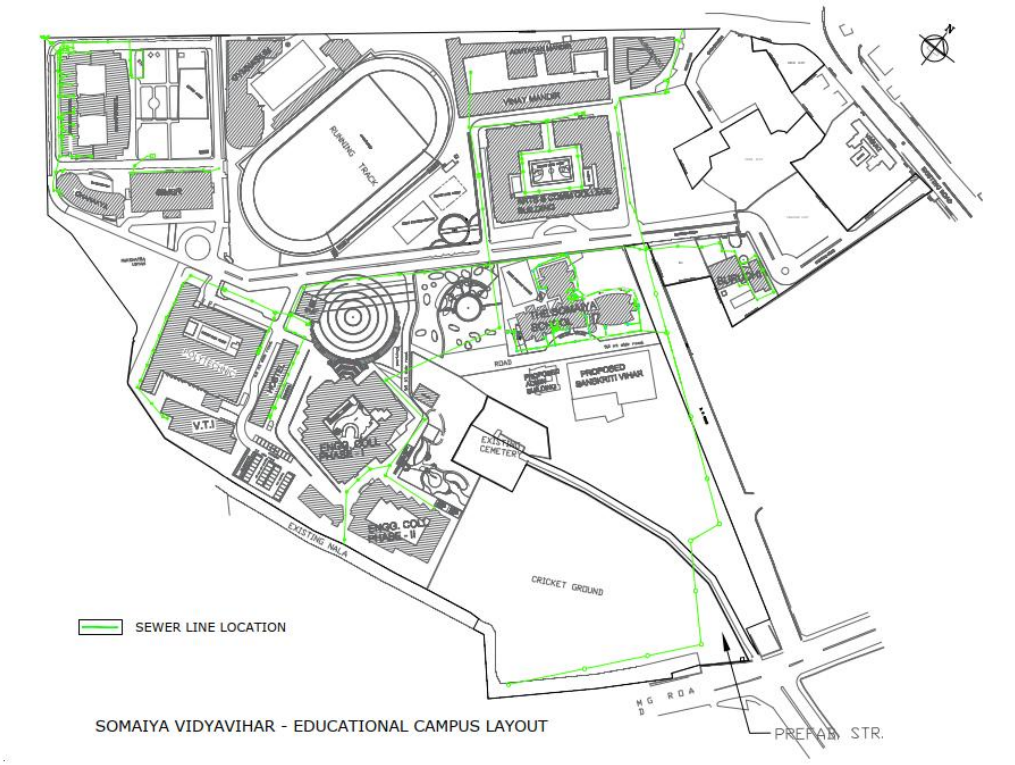


Figure 2 Sewer Line Location in the Campus

3.5.2. RAINWATER HARVESTING

The campus has an established rainwater harvesting system since **June 2010**:

- **Objective:** Harvest **5 crore Liters/year**, with 1.5 crore liters stored and rest recharged into the ground.
- **Design and Implementation:** Executed by D&D Ecotech Services, based on 25 years of rainfall data.
- **Catchment Areas:** Rooftops of Arts, Engineering, and Hostel buildings.
- **Components:**
    - **Catchment Areas and Storage Tanks -** Rainwater collected from the terraces of the Arts College, Engineering, and Hostel buildings is directed to existing borewell tanks via advanced filters for non-drinking purposes. Overflow and rainwater from roads and gardens are diverted to recharge

tanks, where it seeps through borewells to depths of 150 to 200 feet, replenishing the groundwater.

- **Desilting and Recharging Pits -** Several recharging pits have been installed at various locations across the campus to facilitate groundwater recharge.

Table 4 Storage Tank Details

Sr. No	Location	Tank Capacity (Liters)	Tank Measurements
1.	Nakshatra Garden	26,204	7.7' x 11' x 11'
2.	Opposite Project Office	30,535 + 7,594	9.4' x 16.5' x 7' + 6' x 9' x 5'
3.	Opposite Polytechnic	13,821 + 9,119	9' x 9.10' x 6' + 7.6' x 7.11' x 6'
4.	Aurobindo	29,049	11.4' x 15.10' x 6'
5.	Engineering Parking	95,286	21.9' x 22.1' x 7'
6.	Arts Building	35,048 + 19,430	12.9' x 13.8' x 7' + 11.4' x 10.10' x 6'

Table 5 Annual Rainwater Harvesting Data:

Year	Reuse (m^3)	Ground Recharge (m^3)
2022-23	3000	3000
2023-24	3200	3200

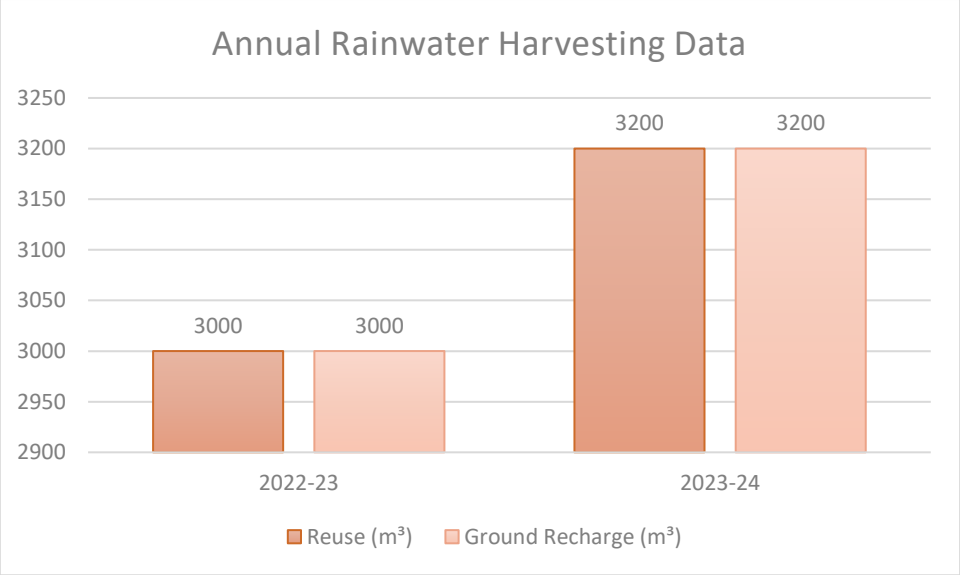


Figure 3 Annual Rainwater Harvesting Data

3.5.3. WET WASTE GENERATION AND TREATMENT

Wet waste is predominantly generated from the university's food service operations, including the canteens located in SIMSR, Sandipani, Engineering, Aurobindo, and The Somaiya School. Based on waste collection records reviewed during the audit, the total wet waste collected from January 2024 to June 2025 amounted to approximately 397,788 kilograms. The collected organic waste is processed through two key systems on campus: a biogas generation unit and a vermicomposting facility.

Table 6 Wet Waste Data (Jan 2024 – June 2025)

Sr. No	Month	Total Waste (Kg)
1	Jan-24	26,205
2	Feb-24	25,833
3	Mar-24	23,397
4	Apr-24	17,284
5	May-24	16,350
6	Jun-24	18,126
7	Jul-24	25,340
8	Aug-24	26,449
9	Sep-24	28,408
10	Oct-24	28,341
11	Nov-24	24,283
12	Dec-24	25,047
13	Jan-25	27,392
14	Feb-25	23,782
15	Mar-25	21,580
16	Apr-25	18,326
17	May-25	11,749

Sr. No	Month	Total Waste (Kg)
18	Jun-25	9,896
	Total	3,97,788

The biogas plant, located adjacent to the engineering canteen, operates on a two-stage slurry mix bio-methanation design with a capacity to process 50 kilograms of food waste per day. The gas generated is utilized for canteen cooking and chemistry laboratory applications. In addition, the vermicomposting facility comprises eight active pits and four curing heaps spread over a 520 square meter area. This facility operates on the heap culture method and uses deep-burrowing earthworms to convert organic matter into compost, which is used in the university's horticultural operations.

Figure 4 Biogas plant

3.5.4. Dry Waste and Recyclables

Dry waste, including paper, cardboard, plastics, and metals, is collected through a centralized collection and disposal system managed by the university's facility services team. The dry recyclables are periodically handed over to pre-identified and recognized scrap dealers. The audit confirmed that documentation regarding vendor agreements and quantity tracking is maintained. The university has implemented a "No Plastic" policy across all its canteens, prohibiting the use of single-use plastics such as straws, plastic glasses, and containers. Alternative materials such as aluminium foil containers and paper-based products are being used.

3.5.5. Electronic Waste (E-Waste) Management

Electronic waste generated from obsolete computers, printers, and laboratory equipment is collected and segregated in designated areas. The university has partnered with **Ecostar Recycling**, an authorized recycler registered under the Maharashtra Pollution Control Board (MPCB), for the safe and compliant disposal of e-waste. Review of disposal certificates confirmed that approximately 2,100 kilograms of e-waste were responsibly disposed of between 2023 and 2024. The disposal activities were found to be in

accordance with the E-Waste Management Rules, 2022, and traceability records were found to be in place.

3.5.6. BIO-MEDICAL WASTE

Somaiya Vidyavihar University has engaged MPCB-authorized waste handlers for the disposal of biomedical waste, in alignment with regulatory expectations. However, the audit revealed the need for reinforcing operational controls, documentation, and compliance mechanisms at the departmental level to fully align with the Biomedical Waste Management Rules, 2016.

To strengthen biomedical waste management across campus facilities, the university must implement the following measures:

- Ensure clear labeling and secure containment of sharps, infectious, and contaminated materials.
- Install closed, color-coded bins with biohazard markings across all medical and laboratory units.
- Maintain comprehensive records of biomedical waste generation, internal storage, and final disposal through licensed vendors.
- Conduct periodic training and refresher sessions for healthcare, laboratory, and housekeeping staff on biomedical waste classification, safe handling, and regulatory compliance.
- Enforce routine inspections and mandatory use of personal protective equipment (PPE) for all personnel involved in biomedical waste handling.

3.5.7. WASTE SEGREGATION PRACTICES

The university has established basic systems for segregating different categories of waste—dry, wet, plastic, hazardous, and e-waste—through the deployment of color-coded bins and designated collection zones. However, during the latest Environmental, Health & Safety (EHS) Audit, several implementation-level deficiencies were observed that require immediate attention and corrective action.

Key audit findings include:

- Inconsistent segregation of dry and wet waste in food service areas, notably the canteen, leading to contamination of compostable waste.
- Uncovered and poorly maintained bins in food handling and high-traffic zones, creating hygiene concerns and attracting pests.
- Improper handling of biomedical waste, including open storage of used needles in cans without designated sharps containers, in violation of prescribed biomedical waste protocols.

- Absence of a disposal mechanism for expired or near-expiry medical supplies, such as medications and clinical consumables, within the campus medical units.
- Presence of expired medicines and soiled bandages in first aid kits, indicating inadequate monitoring and replenishment systems.
- Lack of formal documentation and waste tracking logs, especially for biomedical waste disposal activities, despite existing vendor agreements.

To improve compliance and operational effectiveness, the university must:

- Reinforce department-wise waste segregation practices through awareness, training, and visual SOPs.
- Appoint responsible waste management coordinators for high-waste-generating zones (e.g., kitchens, hostels, medical rooms).
- Initiate routine compliance checks and waste audits to identify non-conforming areas and promote continual improvement.

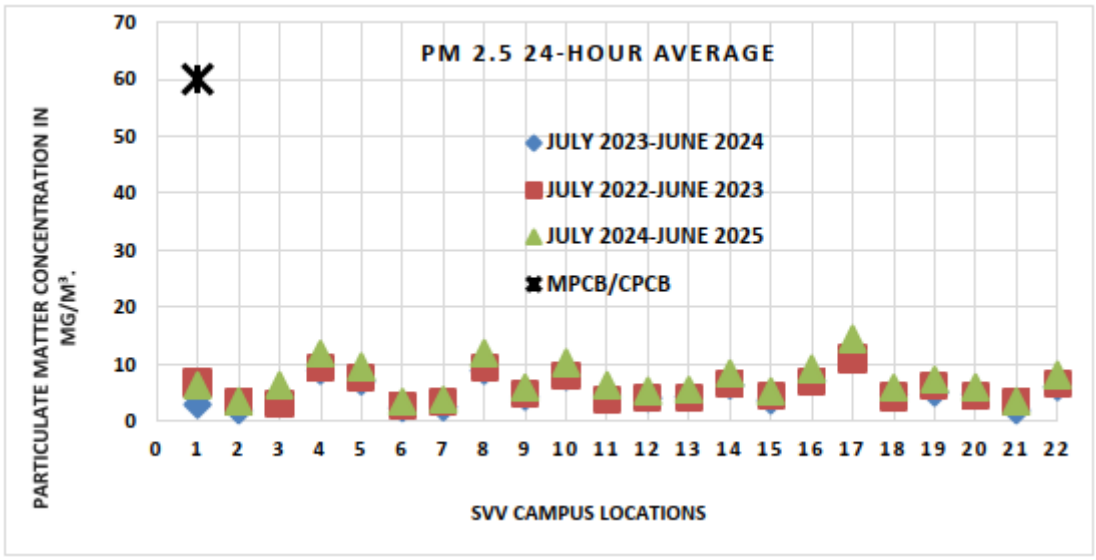
3.6.AIR AND NOISE QUALITY

3.6.1. AIR QUALITY ASSESSMENT

The air quality monitoring at Somaiya Vidyavihar University (SVU) reflects a strong commitment to maintaining a healthy and pollution-free environment across the academic and residential blocks of the campus. A detailed air pollution study conducted by the Department of Mechanical Engineering in collaboration with the Environmental Science Department covered 22 locations within the campus from July 2022 to June 2025.

The analysis of PM 2.5 (Particulate Matter) levels showed consistently low values compared to the CPCB/MPCB permissible limits:

- Annual PM 2.5 levels: Mostly below 19 $\mu g/m^3$, significantly under the CPCB threshold of 40 $\mu g/m^3$.
- 24-hour PM 2.5 levels: Largely below 15 $\mu g/m^3$, versus the CPCB limit of 60 $\mu g/m^3$.



LOCATION NAMES

1)	BETWEEN A&B BUILDING	12)	GHATKOPAR GATE
2)	SOMAIYA STATUE	13)	GATE 1 PARKING
3)	GARGI PLAZA	14)	SIMSR CANTEEN
4)	A BUILDING QUADRANGLE	15)	SOMAIYA SCHOOL ENTRY
5)	POLYTECHNIC QUADRANGLE	16)	CRICKET GROUND
6)	SK SOMAIYA	17)	FACULTY PARKING
7)	KJ ARTS AND COMMERCE	18)	INSIDE AUROBINDO BLDG
8)	OUTSIDE ENGG CANTEEN	19)	TILAKNAGAR GATE
9)	GANPATI MURTI	20)	MAGGI POINT
10)	VVH GATE	21)	AUDITORIUM
11)	NEAR BASKETBALL COURT	22)	RELAY GROUND CENTRE

Figure 5 PM 2.5 Comparison

This was made possible through SVU's proactive environmental management practices, including:

- Dense green coverage across campus
- Restricted vehicular movement within internal roads
- Use of clean energy and well-maintained infrastructure
- Dust control measures around construction zones and playfields

The Air Quality Index (AQI) for the last three years has consistently been in the *'Good'* category:

- 2022–2023: 13.05 (Annual), 23.61 (24-hour)
- 2023–2024: 11.38 (Annual), 21.55 (24-hour)
- 2024–2025: 25.3 (Annual), 40.0 (24-hour)

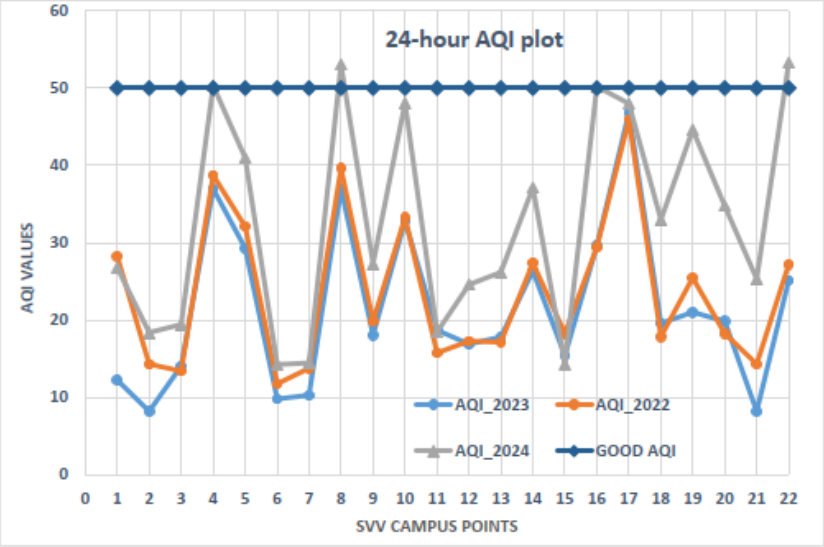


Figure 6 AQI

These AQI values demonstrate the effectiveness of SVU's green campus initiatives and offer a replicable model for other urban academic institutions.

3.6.2. NOISE QUALITY ASSESSMENT

Noise monitoring was conducted on 4th July 2025 at three representative locations:

- STN-I: Computer Lab 5 (6th Floor, Bhaskaracharya Building)
- STN-II: Ground area
- STN-III: Engineering College Canteen

Noise levels were recorded hourly from 10:30 AM to 5:30 PM. The average daytime Leq (equivalent continuous sound level) was:

- STN-I: 55.01 dB(A)
- STN-II: 65.08 dB(A)
- STN-III: 67.76 dB(A)

These values were compared against the Ambient Noise Standards as per The Noise Pollution (Regulation and Control) Rules, 2000:

- Permissible limit for commercial areas: 65 dB(A) during daytime
- Permissible limit for educational institutions/residential areas: 55 dB(A) during daytime

Observations:

- STN-I (educational zone) remained within the limit (55.01 dB).
- STN-II and STN-III, which are closer to public and cafeteria areas, showed slightly higher readings (~65–68 dB), aligned with permissible commercial area limits.

Recommendations:

- Continue restricting use of honking and high-noise generators in sensitive zones.
- Promote awareness and signage near silence zones like the library, labs, and administrative areas.
- Introduce natural noise barriers such as hedges or vertical gardens near canteen and ground areas.

Somaiya Vidyavihar University,
Somaiya School of Basic Sciences
Department of Environmental Science

TEST REPORT

ISSUED TO: Somaiya Vidyavihar University		**REPORT NO.**	: R/N/2025/07/04
		ISSUE DATE	: 04/07/2025

SAMPLE PARTICULARS	:	**NOISE MONITORING**
Sample Type	:	Ambient Noise Monitoring
Sample Location	:	Multiple Locations
Sampling Date	:	04/07/2025
Sample Lab Code	:	N/2025/07/04
Any Other Information	:	NA

LOCATION	**STN-I:** Computer Lab 5, 6th Floor Bhaskaracharya Building .	**STN-II: Ground**	**STN – III: Engineering College Canteen**
TIME (HRS)	**Noise Level Reading in dB (A)**		
10:30	56.7	65.1	69.2
11:30	69.4	63.5	67.4
12:30	51.4	65.3	66.1
13:30	53.1	62.4	63.7
14:30	61.4	65.6	70.5
15:30	56.8	68.6	72.6
16:30	41.4	63.9	69.2
17:30	49.9	66.3	63.4
DAY Leq	**55.01**	**65.08**	**67.76**

PERMISSIBLE LIMITS:-	**AS PER THE NOISE POLLUTION (REGULATION AND CONTROL) RULES, 2000, AMBIENT NOISE STANDARDS**		
Area Code	**Category of Area / zone**	**Limits in dB(A) Leq**	
		Day Time	**Day Time**
(A)	Industrial area	75	70
(B)	Commercial area	65	55
(C)	Residential area	55	45
(D)	Silence Zone	50	40
NOTE:-	01. Day time shall mean from 06:00 Hrs. to 22:00 hrs..		
	02. Night time shall mean from 22:00 Hrs. to 06.00 Hrs.		

(Prepared By)		**(Authorized By)**
Mr Ajay Pol		**Dr Nilesh Wagh**
Lab Assistant		**Head of the Department**

Figure 7 Noise Monitoring Report

3.7.BIODIVERSITY AND GREEN CAMPUS

Somaiya Vidyavihar University demonstrates a deep-rooted commitment to biodiversity conservation and sustainable landscape development through its holistic *Green Campus* initiatives. The University maintains a well-preserved ecological landscape that supports diverse species of flora and fauna, contributing to the health of urban biodiversity and environmental resilience.

3.7.1. FLORA DIVERSITY AND TREE INVENTORY

The campus is home to an impressive 2,672 trees, comprising a rich mix of medicinal, ornamental, fruit-bearing, and native species. A comprehensive Tree Inventory has been mapped and maintained across different institutional blocks and green zones. Notable tree species include Ashoka, Neem, Mango, Coconut, Kadamb, Seeta Ashoka, and a wide variety of palms and flowering trees. The green cover not only enhances aesthetic appeal but also improves microclimatic conditions and air quality.

Designated areas such as the Nakshatra Garden, Founders' Garden, and Butterfly Garden are vital biodiversity pockets contributing to ecological balance, habitat creation, and student engagement in conservation.

Additionally, the University promotes vegetable cultivation (such as brinjal, spinach, and drumstick) and maintains over 1,500 medicinal trees, reflecting a blend of educational, ecological, and nutritional values in landscape management.

3.7.2. FAUNAL DIVERSITY AND ECOLOGICAL COEXISTENCE

Somaiya Vidyavihar University supports a thriving population of avian, reptilian, and butterfly species, making the campus a biodiverse micro-ecosystem within an urban environment.

Key highlights include:

- **Bird Species**: Rose-ringed Parakeet, Oriental Magpie Robin, Coppersmith Barbet, Purple Sunbird, Asian Koel, and Indian Golden Oriole.
- **Butterflies**: Common Mormon, Lemon Pansy, Tailed Jay, and Red Pierrot—indicative of healthy pollinator activity and low chemical use.
- **Reptiles and Amphibians**: Oriental Rat Snake, Indian Black Turtle, Keeled Skink, and Garden Lizards—showing habitat viability even for sensitive species.

The campus's annual participation in the Campus Bird Count (CBC) fosters biodiversity documentation and environmental education. In 2025, students documented 24 species and over 250 individual sightings, submitting data on eBird, supporting citizen science and conservation efforts.

3.7.3. GREEN SPACES AND SUSTAINABLE DESIGN

The University has strategically developed specialized green zones to reinforce its sustainability agenda. These include:

- **Nakshatra Garden** – symbolizing astrological and medicinal plants
- **Butterfly Garden** – enhancing pollinator-friendly habitats
- **Founders' Garden** – an eco-reflective space dedicated to legacy and learning

Additional eco-friendly features such as EV charging stations, pedestrian pathways, and restricted vehicle zones further reinforce a sustainable campus ecosystem.

3.8.WATER MANAGEMENT

Somaiya Vidyavihar University has implemented robust water management practices to ensure sustainable and efficient use of water resources. The approach focuses on sourcing, conservation, reuse, and quality monitoring across the campus.

3.8.1. SOURCES OF WATER

The university utilizes a combination of municipal water supply and borewells:

- Borewells:
  - Total: 6 borewells
  - Depth: 13–15 feet
  - Locations: Rashtriya Sanskriti Sanstha, Suruchi, Kho Kho Ground, The Somaiya School, Near Open Table Tennis area, and Maitreyi Hostel
- Usage: Gardening, toilet flushing, washing, and cleaning
- Municipal Supply (BMC):
  - Each building has an individual water meter.
  - Used exclusively for drinking purposes.
  - Stored in underground tanks, then pumped to overhead tanks.

3.8.2. WATER STORAGE INFRASTRUCTURE

Multiple **Underground (UG)** and **Overhead (OH)** tanks are installed across buildings. Water is distributed efficiently via this storage system throughout the day.

3.8.3. RAINWATER HARVESTING (RWH)

The campus has an established rainwater harvesting system since **June 2010**:

- **Objective:** Harvest **5 crore Liters/year**, with 1.5 crore liters stored and rest recharged into the ground.
- **Design and Implementation:** Executed by D&D Ecotech Services, based on 25 years of rainfall data.
- **Catchment Areas:** Rooftops of Arts, Engineering, and Hostel buildings.
- **Components:**
    - **Catchment Areas and Storage Tanks -** Rainwater collected from the terraces of the Arts College, Engineering, and Hostel buildings is directed to existing borewell tanks via advanced filters for non-drinking purposes. Overflow and rainwater from roads and gardens are diverted to recharge tanks, where it seeps through borewells to depths of 150 to 200 feet, replenishing the groundwater.
    - **Desilting and Recharging Pits -** Several recharging pits have been installed at various locations across the campus to facilitate groundwater recharge.

Table 7 Storage Tank Details

Sr. No	Location	Tank Capacity (Liters)	Tank Measurements
7.	Nakshatra Garden	26,204	7.7' x 11' x 11'
8.	Opposite Project Office	30,535 + 7,594	9.4' x 16.5' x 7' + 6' x 9' x 5'
9.	Opposite Polytechnic	13,821 + 9,119	9' x 9.10' x 6' + 7.6' x 7.11' x 6'
10.	Aurobindo	29,049	11.4' x 15.10' x 6'
11.	Engineering Parking	95,286	21.9' x 22.1' x 7'

12.	Arts Building	35,048 + 19,430	12.9' x 13.8' x 7' + 11.4' x 10.10' x 6'

Table 8 Annual Rainwater Harvesting Data:

Year	Reuse (m^3)	Ground Recharge (m^3)
2022-23	3000	3000
2023-24	3200	3200

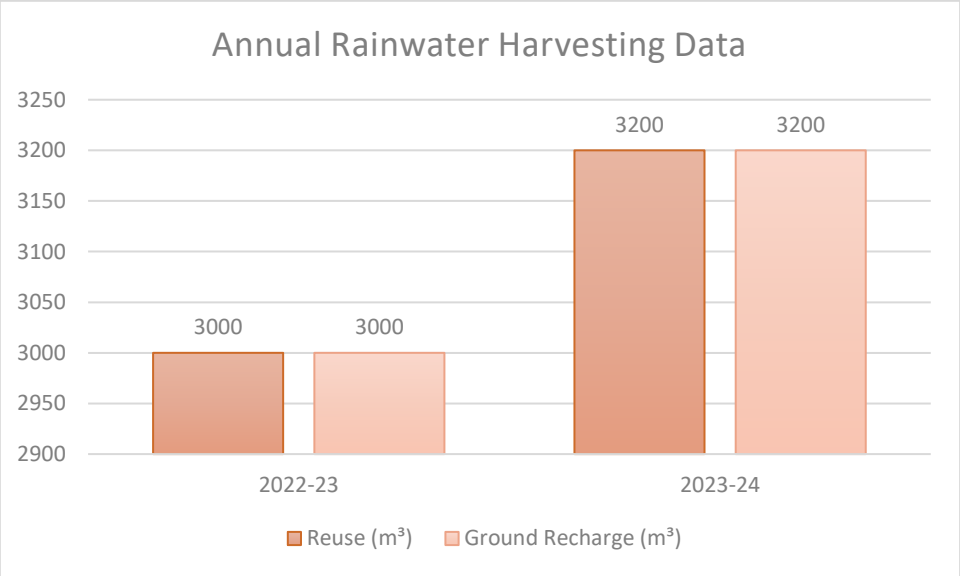


Figure 8 Annual Rainwater Harvesting Data

3.8.4. WASTEWATER MANAGEMENT (STP)

The STP operates on a zero-energy treatment process, eliminating the need for external power inputs during core treatment stages. This approach not only minimizes the operational carbon footprint but also contributes to cost efficiency and energy conservation.

The treated water from the STP is effectively reused for landscape irrigation and gardening within the campus. This significantly reduces dependency on freshwater sources, particularly during dry seasons, and promotes circular water economy principles.

The STP is integrated into the central sewer network of the university, as shown in the attached campus sewer layout. All major buildings are connected to this system through an underground drainage network that directs wastewater to the treatment facility.

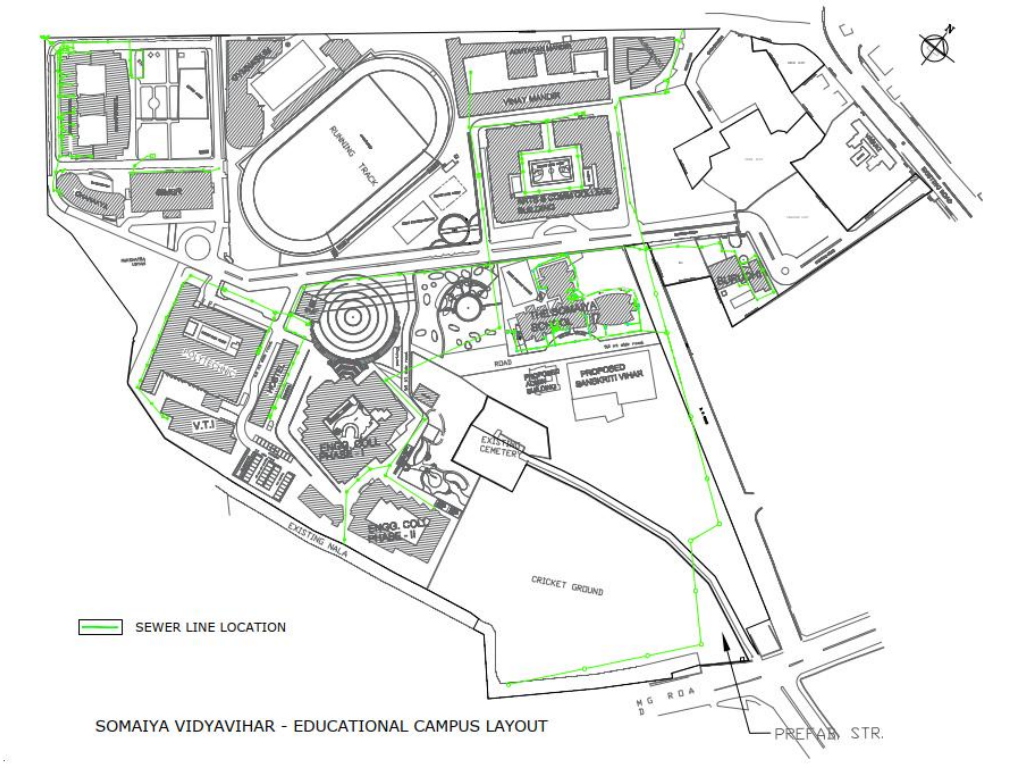


Figure 9 Sewer Line Location in the Campus

3.8.5. WATER QUALITY MONITORING

- Regular water sample testing is conducted, as per reports from **Nov 2024 to May 2025**.
- Parameters like pH, TDS, microbial content are monitored to ensure potable quality for drinking and sanitation purposes.

3.9.LEGAL COMPLIANCE AND LICENSING

Somaiya Vidyavihar University demonstrates due diligence in ensuring adherence to environmental and statutory regulations laid down by the Government of India and local authorities. The University maintains a comprehensive legal compliance framework, ensuring that all necessary permissions, licenses, and no objection certificates (NOCs) related to environment, waste management, fire safety, and institutional establishment are obtained and periodically renewed.

The following key legal and environmental clearances have been verified during the course of this audit:

3.9.1. UNIVERSITY ESTABLISHMENT RECOGNITION

The University has been formally established and recognized under the provisions of the Somaiya Vidyavihar University Act, 2019, as documented in the University Establishment Certificate.

3.9.2. FIRE SAFETY AND CFO NOCS

Somaiya Vidyavihar University has obtained comprehensive Fire No Objection Certificates (Fire NOCs) from the concerned authorities for multiple campus blocks and facilities. These certificates validate that the fire safety infrastructure and preventive measures implemented at the university comply with the Maharashtra Fire Prevention and Life Safety Measures Act, 2006. Fire safety systems have been installed by government-approved agencies. Periodic inspections and submission of Form B are followed to ensure continued operational readiness of firefighting systems.

Fire extinguishers, hydrants, alarms, and evacuation systems are deployed and maintained across the campus.

3.9.3. CONSENT TO OPERATE (CFO) – POLLUTION CONTROL COMPLIANCE

The university has secured Consent to Operate (CFO) from the Maharashtra Pollution Control Board (MPCB) for its hostel and academic blocks, confirming adherence to air and water pollution norms under the Air Act 1981 and Water Act 1974.

Copies of issued CFO NOCs for hostels and BIORIIDL premises have been reviewed as part of this audit.

3.9.4. WASTE MANAGEMENT AUTHORIZATIONS

Solid Waste and E-Waste Management agreements are in place with authorized vendors. Notably:

- The University has a valid E-Waste Disposal Agreement with Ecostar, an authorized recycler.
- An MPCB Waste Vendor Agreement has been signed for scientific disposal of solid and hazardous waste, in compliance with Solid Waste Management Rules, 2016 and E-Waste Management Rules, 2016.

3.9.5. OTHER LICENSES AND OPERATIONAL COMPLIANCE

Certificates relating to structural stability, electrical safety, and fire-rated installations have been submitted for institutional buildings.

Periodic updates to regional authorities, maintenance of compliance records, and continuous improvement initiatives support the University's commitment to legal conformance.

This systematic compliance approach strengthens institutional credibility, reduces environmental risk, and reflects the University's proactive governance in environmental responsibility.

4. SITE VISIT

The site visit revealed a mix of positive practices and areas of concern (AoC) requiring immediate attention and corrective action. Key observations are categorized below:

Positive Observations:

- **Solar Lighting**: Solar-powered lighting systems are in use across parts of the campus.
- **Botanical Garden**: Presence of a botanical garden, although limited in scale.
- **Presence of Wells**: Noted in the botanical garden.
- **Fire Safety**: Fire cylinder maintenance found to be adequate as per record AR/EE/05/01.
- **Biogas Plant**: Installed for canteen waste management.
- **Safety & Emergency**: Safety shower and eyewash stations are available in the Engineering Chemistry Lab.

Areas of Concern (AoC) & Observations:

General Infrastructure and Utilities:

- Dog identification tags not as per AVS standards.
- Pest control records – To Be Updated (TBU).
- Pit numbering missing on the rainwater harvesting pit.
- Canteen vendor certificates – TBU; PPE compliance not evident.
- No signage for “No Honking” in campus for permitted vehicles.
- Drinking water points not marked clearly as “Not Fit for Drinking”.
- Chemical waste disposal practices in the Shimadzu Lab (SIRAC Wing) and Polymer Science Lab need formalized procedures.

Chemical and Hazardous Materials Management:

- Lack of labeling and segregation of hazardous chemicals.
- No separate, designated storage for PPEs.
- No secondary containment for stored chemicals.
- Chemical waste disposal procedures appear unregulated.

Medical & First Aid:

- Open and unhygienic bandages found in First Aid boxes.
- Expired medications observed in First Aid kits.
- No separate storage for expired or near-expiry medicines.
- Needle disposal not done properly – observed to be casually stored in cans.
- No medicines or medical equipment found stored in the ambulance.

Housekeeping and Washrooms:

- No separate storage for housekeeping materials in washrooms.
- Rubber sheet on stretcher and bedsheets in unhygienic condition.

Electrical & Safety Hazards:

- No rubber mats placed in front or rear of electrical panels.
- Underground STP poses a major trip hazard due to lack of visibility and safety markings.

Waste Management:

- Water logging in common areas due to inadequate drainage.
- Open waste bins in canteen – poor hygiene practice.
- Improper segregation of dry and wet waste.
- Poor food storage conditions observed.
- No flycatchers installed in food preparation or serving areas.
- Waste oil disposal not linked with an approved vendor.
- Rodent boxes missing in the kitchen area.

Chemical Handling:

- Powder detergent (non-food grade) used for cleaning canteen utensils – not appropriate for food-contact surfaces.

5. CHAPTER 4: CONCLUSION

The environmental audit of the University highlights a consistent effort towards compliance with applicable environmental norms and regulations. The institution has adopted several measures to minimize air emissions, reduce waste generation, lower water consumption, and promote energy and water conservation across its operations.

However, environmental sustainability is a dynamic and continuous process that demands regular monitoring, periodic evaluation, and systematic documentation to ensure long-term effectiveness and continual improvement.

Based on the documentation reviewed and site observations conducted, the following conclusions are drawn:

5.1.ACTION TAKEN ON LAST AUDIT POINTS

The previous Green Campus Assessment for Somaiya Vidyavihar University was conducted by IRClass Systems and Solutions Pvt. Ltd. from 25th to 27th June 2024. The report acknowledged several sustainability initiatives already implemented on campus and offered three key recommendations for further improvement.

A formal Action Taken Report was submitted by the Green Audit Convenor, Dr. Bharati Choudhari, detailing the progress made against each recommendation. A summary of the same is presented below:

Previous Recommendation	Action Taken by SVU
1. **Garden waste can be utilized for vermicomposting**	Proposal submitted to higher authorities for initiating vermicomposting near the **VTI block**. Budgeting, equipment, and structural planning are under review.
2. **Displaying tree photographs with names in theme parks**	Activity initiated in 2024. Additionally, **QR code tagging** has been introduced on trees to provide visitors and botany students access to scientific details and uses of trees.
3. **Plastic waste can be recycled**	Plastic waste segregation has been enforced. Recyclable waste is now being handed over to **BMC-authorized agencies** for proper recycling. Documentation is maintained by the **Project Office**.

The university has shown commitment to act upon recommendations in a timely and structured manner, reflecting its proactive stance on sustainable campus management.

5.2.OFI/Observation

During the site visit and document review, several **Observations and Opportunities for Improvement (OFI)** were identified. These findings, while not necessarily non-

compliances, represent potential risks or gaps in current practices and provide scope for enhancement in environmental, health, and safety (EHS) management.

A. Chemical and Hazardous Waste Management

- Absence of proper labelling and segregation of hazardous chemicals in multiple laboratories.
- No secondary containment provided for stored chemicals, increasing the risk of leaks and contamination.
- Improper disposal practices observed in Shimadzu Lab and Polymer Science Lab.
- No separate and designated storage area for PPEs.
- Needle disposal was found to be unsafe, with needles simply stored in open containers.
- Chemical waste disposal process not clearly linked to authorized vendors or documented disposal protocols.

B. Safety and Emergency Preparedness

- Expired medications and unhygienic open bandages were found in First Aid Boxes.
- Emergency exit areas were poorly maintained, with no emergency lighting installed.
- No rubber mats provided in front or behind electrical panels, posing electrical hazard risks.
- Underground STP (Sewage Treatment Plant) area presents a significant trip hazard due to lack of warning signage and barriers.
- Ambulance lacked essential medical supplies and medicines, affecting emergency preparedness.

C. Waste Management

- Inadequate dry and wet waste segregation in canteen and campus areas.
- Open waste bins found in the canteen, leading to unhygienic conditions.
- Poor food storage practices in kitchen and canteen areas.
- No provision for safe waste oil disposal through an approved vendor.
- Absence of rodent traps or control measures in kitchen areas.
- Powder detergent (not food-grade) being used to wash utensils.

- Vermicompost system is operational, but monitoring and maintenance protocols need to be documented.

D. Water Management

- Water logging was observed in several common areas, indicating poor drainage.
- Pit numbering missing for rainwater harvesting structures, reducing traceability and monitoring effectiveness.
- Drinking water points lacked appropriate signage, such as "Not fit for drinking" where applicable.

E. General Housekeeping and Infrastructure

- No separate storage available for housekeeping material in washrooms.
- Rubber sheets and bedsheets on stretchers were found in unhygienic condition.
- Safety signage, PPE instructions, and hazard labels were either missing or faded in certain areas.

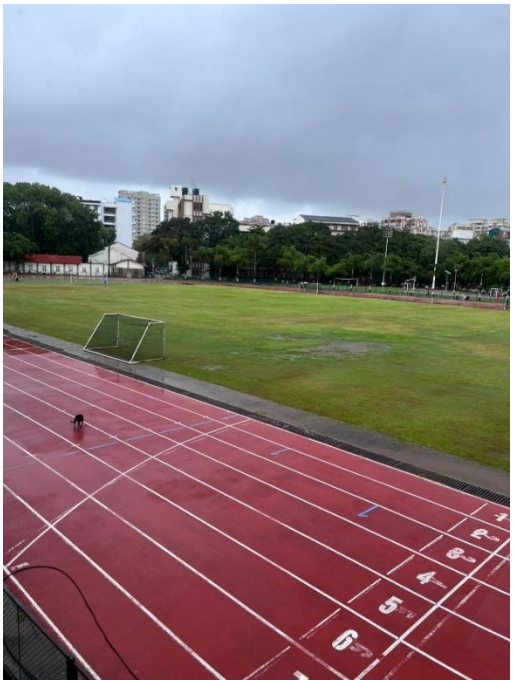
F. Positive Initiatives Noted (with scope for scale-up)

- Solar lighting installed in parts of the campus—can be extended to other areas.
- Biogas plant installed for canteen waste—monitoring and optimization recommended.
- Vermicompost plant operational—suggest expanding coverage and recording output data.
- Safety and eyewash showers available in Engineering Chemistry Lab—can be installed in other high-risk labs.

These recommendations aim to transition SVU from sustainable implementation to sustainable excellence, ensuring long-term ecological responsibility and institutional leadership in environment practices. The timeline for closure of above recommendation shall be one audit cycle.

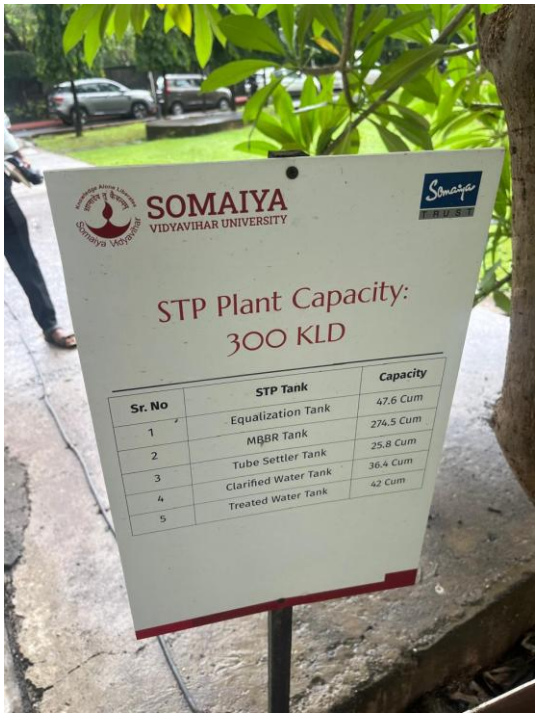
Next Environment Audit to be conducted before 09-July 2026.

5.3.NOTEWORTHY POINTS

Green Sports Ground and Walking Track Area – Promotes eco-friendly physical activities with natural landscaping	Tree Canopy View from rooms – Natural ventilation and daylighting through green planning
	
Awareness Poster on Energy Saving – Sensitizing students on environmental responsibility	**Solar-Powered Electric Cart – Sustainable in-campus mobility**
	

Shaded Green Walkways – Enhancing microclimate and walkability	Herbal Garden and Native Plant Area – Part of biodiversity conservation drive
	

Lush Lawns with Fountain – Aesthetic and microclimate benefits with treated water reuse	
	

STP Plant Signage (300 KLD) – Signifying water conservation efforts through sewage recycling	Botanical Trail & Awareness Zone – Signboards educate visitors on native plant species
	

Electric Campus Vehicle & Forested Pathway – Promoting zero-emission mobility and forest patch development

Audit Team Photo with SVU Officials – Collaborative execution of the Green Audit

5.4.INITIATIVE/ACTIVITY THROUGH ENVIRONMENT

In line with its commitment to sustainability and ecological awareness, Somaiya Vidyavihar University, through the Department of Business Studies and Accounting and Finance, successfully conducted a Tree Plantation Campaign under the banner of SKSCBC. This impactful initiative took place at Karjat, Pushpam Lords Resort on 23rd and 24th January 2025 over a span of two days.

A total of 175 saplings were planted by participating students and faculty members, showcasing the university's proactive role in promoting green consciousness among youth. The campaign not only contributed to enhancing green cover but also served as a live sustainability education module, encouraging students to take ownership of environmental stewardship.

This off-campus plantation activity aligns closely with the objectives of SVU's Green Campus Policy, specifically addressing themes such as biodiversity, community engagement, and environmental education. The program encouraged student participation, teamwork, and understanding of ecological responsibilities in real-world settings, thereby instilling long-term environmental values.

This green initiative stands as a testament to SVU's vision of embedding sustainability into every facet of campus life and beyond, helping to build environmentally responsible citizens for a better tomorrow.

Figure 10 Tree Plantation Campaign by SKSCBC – Green Initiative at Karjat