



University: UzSWLU
Country: Uzbekistan
Web Address: <https://www.uzswlu.uz/en>

3 Waste

3.17 Sewage Disposal

In 2025, Uzbekistan State World Languages University (UzSWLU) ensured complete and safe sewage disposal across all campus zones, including academic buildings, dormitories, cafeterias, and laboratories.

The university's sewage network is fully connected to the Tashkent City Central Sewage Treatment System, operated by *Tashkent Suv Taminoti* under the Ministry of Housing and Communal Services.

To strengthen sustainability and hygiene, localized pre-treatment systems and monitoring technologies were implemented under the *Green Campus Strategy (2023–2030)*.

Sewage and Wastewater Management System

- **Centralized Network Connection:**
All sewage (greywater and blackwater) is channeled into the municipal wastewater system, where it undergoes multi-stage treatment (mechanical, biological, and chemical purification) before release.
- **Pre-treatment Units:**
 - **Grease traps** installed in cafeterias and canteens prevent oil and fat discharge.
 - **Sediment filters** in dormitories capture suspended solids.
 - **Laboratory drainage systems** include neutralization units for chemical residues.
- **Smart Monitoring and Control:**
 - In 2025, *IoT-based flow sensors* were expanded to track sewage movement and detect blockages in real time.
 - Data are automatically uploaded to the UzSWLU Green Data Portal, ensuring transparency and efficiency in reporting.
- **Regular Maintenance:**
Routine pipeline flushing, manhole inspections, and pump repairs are conducted monthly by trained maintenance staff.
The system achieved **zero major blockages or overflows** during 2025.

Wastewater Data (2025)

Source	Estimated Volume (m ³ /year)	Treatment / Disposal Method
Academic & Administrative Buildings	22,800	Connected to city sewage system
Student Dormitories	18,200	Centralized disposal with sediment traps
Cafeterias and Food Areas	6,700	Grease trap pre-filtration + city network



Source	Estimated Volume (m ³ /year)	Treatment / Disposal Method
Laboratories	1,200	Neutralization before disposal
Green Zones (reuse for irrigation)	2,000	Greywater reuse after filtration
Total Sewage Volume	50,900 m³/year	100% safely treated and disposed

Key Sustainability Achievements (2025)

- 2,000 m³ of treated greywater reused for landscape irrigation in the *Linguistic Garden* area.
- 30% reduction in oil and grease contamination from cafeteria drainage compared to 2024.
- Introduction of flow sensors in three major buildings for real-time sewage control.
- Quarterly water quality tests conducted by the Faculty of Natural Sciences confirmed compliance with environmental standards (pH 6.8–7.3; BOD < 20 mg/L).
- Zero contamination or overflow incidents throughout 2025.
- Digital integration: all sewage and water usage data are tracked via the Green Data Portal.

Indicator	2024	2025	Change
Sewage volume treated	48,000 m ³	50,900 m ³	▲ +6% (due to higher campus population)
Water reuse	1,000 m ³	2,000 m ³	▲ +100%
Oil/grease concentration	45 mg/L	30 mg/L	▼ –33%
Overflow incidents	1 minor	0	Eliminated
Monitoring coverage	40%	80%	▲ +40%

Environmental and Educational Impact

- Reduced load on the city sewage system.
- Improved awareness among cafeteria and dormitory staff regarding waste segregation.
- Active involvement of 120 students in wastewater monitoring and laboratory analysis projects.

Contribution to SDGs

This initiative directly supports:

- **SDG 6 – Clean Water and Sanitation**, ensuring safe wastewater management and water reuse.
- **SDG 11 – Sustainable Cities and Communities**, through integration with the Tashkent municipal sewage network.
- **SDG 12 – Responsible Consumption and Production**, via waste pre-treatment and reduced contamination.
- **SDG 13 – Climate Action**, by lowering pollutant emissions and optimizing water use.



Sewage Disposal

Additional evidence link (i.e., for videos, more images, or other files that are not included in this file):