UI GreenMetric Questionnaire

WATER POLLUTION CONTROL IN CAMPUS AREA

Consolidated Policy, Implementation, Monitoring and Evidence Report

Contents

Executive Summary

Termez State University operates an integrated campus water pollution control program covering source prevention, wastewater collection, sewer inspection, water quality monitoring, municipal treatment, rainwater separation, emergency response, recordkeeping and public disclosure. Domestic and technical wastewater from the university campuses is conveyed through the internal sewer network to the Termez city wastewater treatment plant under the institutional arrangement with Surkhandarya Water Supply JSC. The municipal plant applies mechanical, biological and tertiary treatment before authorized technical reuse or compliant final discharge.

The university generates approximately 42.28 thousand m3 of wastewater per year from academic buildings, dormitories, canteens, laboratories, sanitary facilities and related campus operations. The broader water system includes four artesian wells, six water towers, three reservoirs and 118 m3 of rainwater-storage capacity. Wastewater and stormwater are managed as separate streams. Rainwater from roofs and channels is stored and reused for irrigation, while direct discharge of untreated wastewater to soil, canals or surface water is prohibited.

Key performance area	2025 institutional position
Wastewater safely conveyed	42.28 thousand m3/year to the Termez municipal sewer and treatment system
Municipal treatment performance	Three-stage treatment; documented treatment effectiveness of approximately 95-97%
Treated-water outcome	Approximately 40-41 thousand m3/year potentially available for authorized technical reuse
Rainwater management	118 m3 storage capacity for irrigation and reduction of polluted runoff
Water-efficient equipment	84.3% of inventoried sanitary and irrigation devices are water efficient
Monitoring	Monthly infrastructure inspections, quarterly laboratory sampling, annual external verification and event-based sampling
2025 management trend	BOD5, COD, TSS, nitrate and phosphate indicators decreased by 8.6-11.7% compared with the 2024 baseline

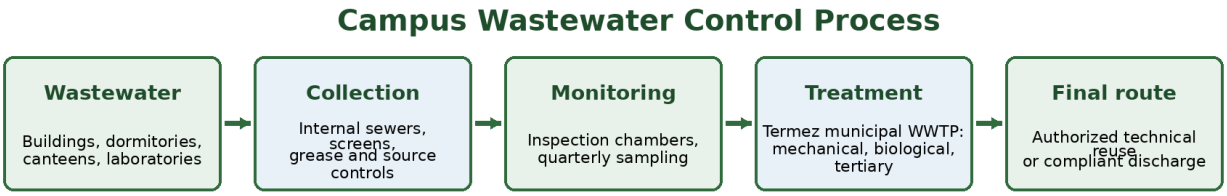


Figure 1. Core wastewater control process used by Termez State University.

Reviewer evidence focus. This file demonstrates how water quality is monitored, which parameters are tested, how results are documented, how responsibilities are assigned, and how the control system operates in practice through maps, procedures, tables, graphs, inspection records and photo evidence.

1. Water Pollution Control and Wastewater Management Policy

1.1 Policy Statement

Termez State University commits to preventing pollution of water resources, protecting public health, maintaining sanitary conditions and ensuring that all wastewater arising from campus activities is safely collected, monitored and transferred to an authorized treatment system. The university applies the prevention hierarchy: avoid pollution at source, segregate hazardous substances, control discharges, inspect the sewer network, monitor water quality, respond to incidents, document results and improve performance annually.

1.2 Purpose and Objectives

- Prevent chemicals, oils, food residues, solids, pathogens and other pollutants from entering campus drains, channels, soil or surface water.
- Maintain an effective wastewater collection and conveyance system connected to the Termez municipal sewer and treatment plant.
- Monitor physical, chemical and biological indicators at defined sampling points and frequencies.
- Maintain verifiable laboratory, inspection, incident, corrective-action and training records.
- Separate stormwater and wastewater streams and maximize safe rainwater reuse for irrigation.
- Publish the policy, monitoring report, maps, laboratory summaries and evidence gallery on the official university website.

1.3 Scope

This policy applies to the Rectorate Campus, Main Campus, North Campus, West Campus, Darband Training and Practice Base, academic and administrative buildings, laboratories, dormitories, canteens, workshops, sanitary facilities, water towers, reservoirs, drains, sewer lines, inspection chambers, rainwater channels, irrigation systems, temporary activities, contractors and all university employees and students.

1.4 Institutional Commitments

Commitment	Operational requirement
Legal and institutional compliance	Apply national water-protection and sanitary requirements, including the institutional reference to Cabinet of Ministers Resolution No. 352 dated 7 June 2025 and the University Development Strategy 2025-2027.
No prohibited discharge	No untreated wastewater, laboratory chemical, oil, paint, solvent, hazardous material, food solid or construction slurry may be discharged to soil, open channels, stormwater drains or surface water.
Central wastewater management	Domestic wastewater is collected through the internal sewer network and conveyed to the Termez municipal system for authorized treatment.
Laboratory source control	Laboratory chemicals, metal-containing solutions and concentrated reagents are collected separately and managed as controlled waste; sink disposal is prohibited unless specifically approved by procedure.

Commitment	Operational requirement
Canteen and food-service control	Food solids and fats are retained through screens, grease-control practices and routine drain maintenance.
Stormwater protection	Roofs, gutters, drainage channels and reservoirs are kept free from waste, chemicals and sediment accumulation; first-flush and post-rainfall inspections are conducted.
Monitoring and disclosure	Quarterly water-quality results and annual performance reports are validated, stored electronically and published in a reviewer-accessible format.
Continuous improvement	Findings, exceedances and incidents result in corrective action, responsible assignment, closure evidence and management review.

1.5 Prohibited and Controlled Discharges

Category	Control requirement
Strictly prohibited	Acids or alkalis outside the approved pH range; mercury or other heavy-metal solutions; solvents; oils; fuels; paint; pesticides; concentrated disinfectants; pharmaceutical chemicals; radioactive materials; infectious laboratory waste.
Controlled at source	Detergents, cleaning chemicals, food-service wastewater, suspended solids, fertilizers and workshop wash water.
Permitted to sanitary sewer	Normal domestic wastewater after source controls and without hazardous substances.
Permitted to stormwater system	Clean roof runoff and uncontaminated rainfall only.

1.6 Policy Approval and Review

Policy identifier	**TSU-WR6-POL-01**
Effective period	2025-2027
Approved by	Rector of Termez State University
Annual review	Environmental Sustainability Coordination Group and Facilities Department

The policy is reviewed every year and after any major sewer overflow, chemical spill, repeated monitoring exceedance, infrastructure modification or change in applicable regulatory requirements.

2. Rector's Internal Directive and Implementation Order

Internal regulatory instrument. The following directive is the university implementation instrument for adoption, assignment of responsibilities, monitoring, reporting and publication of the WR6 program.

RECTOR'S DIRECTIVE ON WASTEWATER MANAGEMENT AND WATER POLLUTION CONTROL

To ensure environmental safety, protect water resources, maintain sanitary conditions, implement the University Development Strategy 2025-2027 and strengthen evidence-based monitoring of wastewater and water quality, the following is ordered:

1. Approve and implement the Water Pollution Control and Wastewater Management Policy TSU-WR6-POL-01 throughout all university campuses and facilities.
2. Approve the annual monitoring plan, sampling-point register, analytical parameter list and standard operating procedures contained in this report.

3. Assign the Facilities and Infrastructure Department as technical custodian of sewers, drains, reservoirs, inspection chambers and related pollution-prevention infrastructure.
4. Assign the Environmental Sustainability Coordination Group as program coordinator responsible for inspection planning, result review, corrective action and annual reporting.
5. Assign the Faculty of Chemistry Laboratory and Environmental Monitoring Team to conduct or coordinate quarterly sampling and analysis of pH, BOD5, COD, TSS, nitrate and phosphate, with additional parameters where risk requires.
6. Assign the Information Technology Department to maintain the electronic water-quality database, evidence repository, backups and dashboard access.
7. Require campus administrators, laboratory managers, dormitory managers, canteen managers and contractors to prevent prohibited discharge and immediately report leaks, blockages, overflows or spills.
8. Require monthly infrastructure inspections, quarterly laboratory monitoring, annual external verification and incident-based sampling.
9. Require that monitoring results, laboratory summaries, maps, inspection reports, awareness materials and the annual Campus Water Quality Monitoring Report be published on the official university website.
10. Require all corrective actions to identify the responsible unit, deadline, closure evidence and verification status. Critical incidents shall be escalated immediately to the responsible Vice-Rector and Rector.

2.1 Implementation Schedule

Action	Time	Responsible unit	Required evidence
Policy and SOP approval	January	Rectorate / Legal and Compliance Unit	Approved policy and directive
Annual monitoring-plan activation	January	Environmental Sustainability Coordination Group	Signed annual plan and sampling calendar
Monthly infrastructure inspection	Every month	Facilities and campus administrators	Inspection checklist and photo record
Quarterly water sampling	March, June, September, December	Faculty of Chemistry Laboratory / Monitoring Team	Chain-of-custody form and result sheet
Database update and review	Within 5 working days of each result	IT Department / Program coordinator	Validated electronic record and dashboard update
Corrective-action closure	Within risk-based deadline	Responsible department	Closure record and verification photo
Annual report and website publication	By 31 January of the following year	Program coordinator / Public Relations	Campus Water Quality Monitoring Report and evidence links

2.2 Authorization and Accountability

The program coordinator may request immediate inspection, sampling, cleaning, repair or temporary suspension of an activity that presents a credible water-pollution risk. Department heads are accountable for timely implementation. Repeated nonconformity is escalated through the university management system.

3. Wastewater System, Flow Diagrams, Risk Points and Maps

3.1 System Description

The main urban campuses are connected to the Termez municipal sewerage system. Wastewater is generated primarily by toilets, washbasins, dormitories, canteens, laboratories, cleaning activities and other domestic or technical uses. It is collected through internal sewer laterals, passes inspection and monitoring points, enters the municipal sewer and is transferred to the Termez city wastewater treatment plant. The university does not claim

an on-campus biological wastewater treatment plant for the urban campuses. No septic tank is identified in the submitted campus asset inventory.

Rainwater and spring water are managed separately. Roof runoff is directed through gutters and channels to storage reservoirs with a total capacity of 118 m3 and is reused for irrigation. At the Darband Training and Practice Base, spring and rainwater are collected in a small artificial pond and used for green-area irrigation. These streams are protected from sewage, chemical and solid-waste contamination.

Source	Water stream / risk	Route	Primary control
Academic and administrative buildings	Domestic wastewater	Internal sewer laterals	Drain screens and routine cleaning
Student dormitories	Sanitary and laundry wastewater	Internal sewer network	Detergent control, blockage prevention, monthly inspection
Canteens and food service	Food residues, fats and detergents	Controlled connection to sewer	Solid screens, grease control, cleaning logs
Chemistry and teaching laboratories	Low-volume wash water and controlled laboratory wastewater	Approved sanitary connection only	Chemical segregation, collection of concentrated solutions, no sink disposal of hazardous chemicals
Maintenance and workshops	Oil-contaminated wash water risk	Controlled area; no storm drain discharge	Bunded storage, spill kits, dry cleanup, authorized waste removal
Roofs and paved areas	Stormwater	Gutters, channels and reservoirs	Litter control, first-flush inspection, sediment removal

3.2 Wastewater Flow Diagram

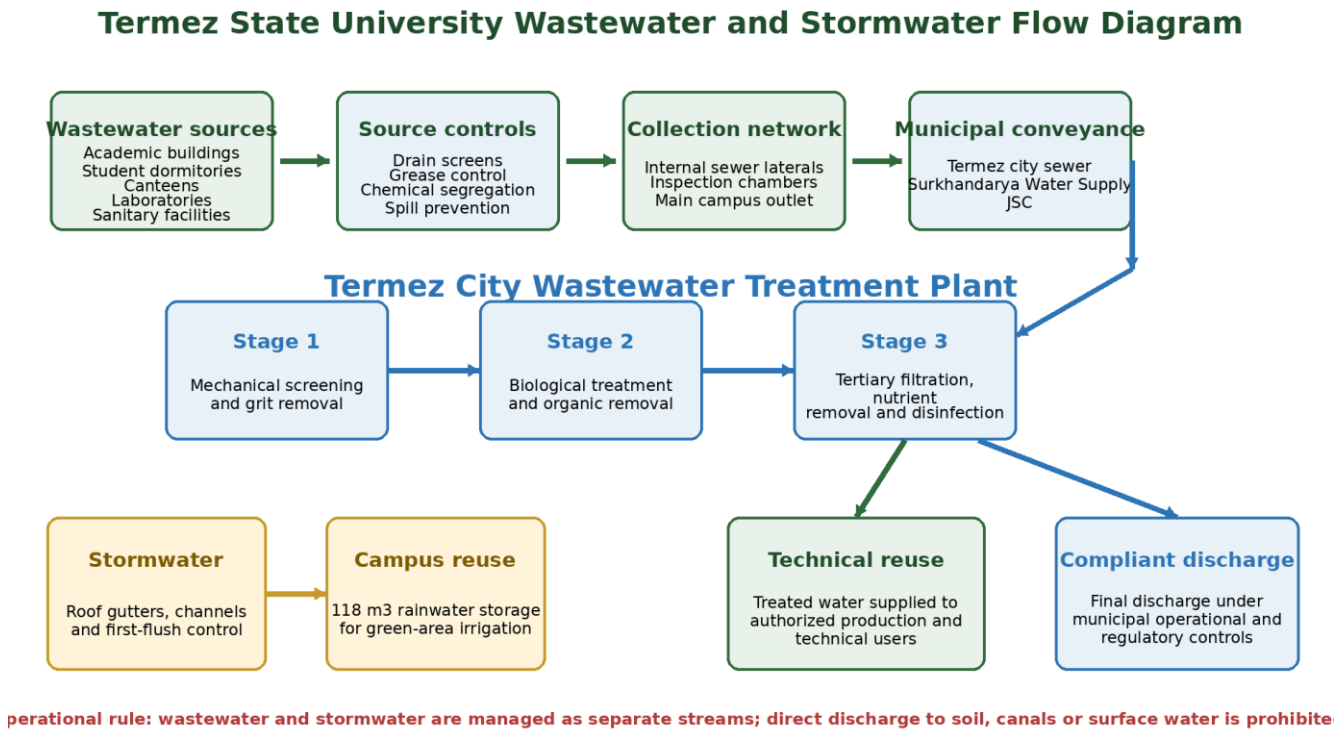


Figure 2. Detailed wastewater and stormwater flow diagram, including treatment and reuse/discharge routes.

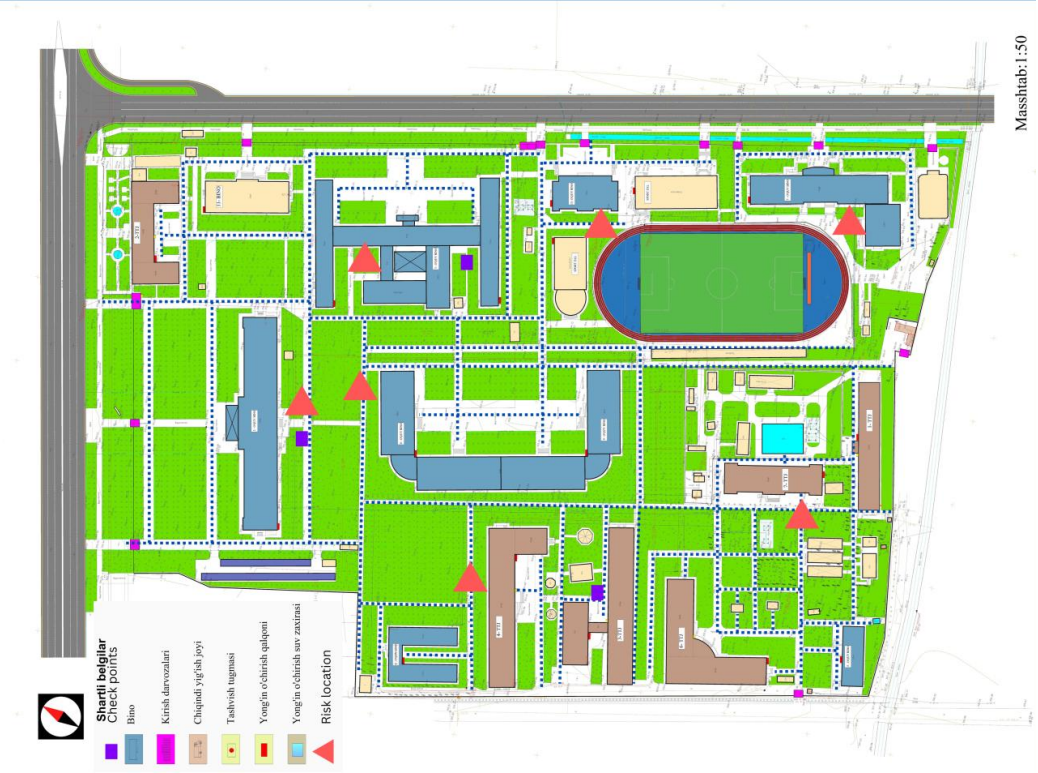
3.3 Municipal Treatment Process

Stage	Function and control
1. Mechanical treatment	Screens, grit removal and physical separation of large solids, sand and floating material. Approximately 40% of gross impurities are retained in the initial stage.

Stage	Function and control
2. Biological treatment	Aeration and microorganisms reduce biodegradable organic matter and substantially lower BOD and COD.
3. Tertiary treatment and disinfection	Deep filtration, phosphorus precipitation, nitrogen removal and disinfection. The documented overall treatment level is approximately 95-97%.
Final route	Treated water is directed to authorized technical reuse by production organizations or compliant final discharge under municipal controls.

Photo evidence - Termez city wastewater treatment facility

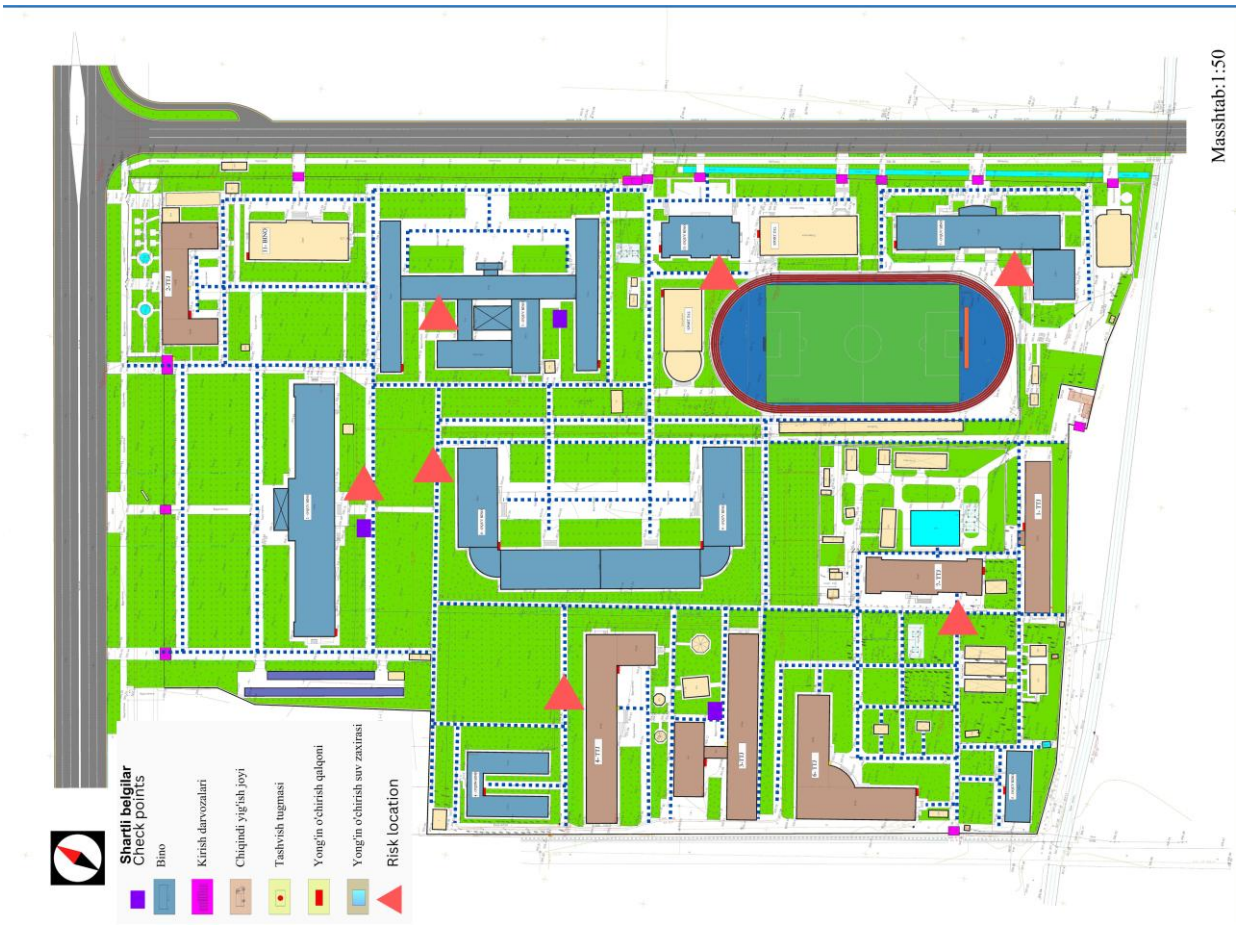
3.4 Campus Water Infrastructure and Pollution Risk Map



ID	Location	Main risk	Rating	Control
R1	Chemistry laboratories	Chemical, metal-ion and high-strength solution discharge	High	Segregated waste containers; no sink disposal; periodic drain inspection
R2	Canteen and food-service drains	Fats, oils, grease and food solids	High	Screens, grease control, daily housekeeping and monthly drain inspection
R3	Dormitory sanitary blocks	Detergent, solids, blockage and overflow	Medium	Drain screens, cleaning schedule, rapid blockage response
R4	Main sewer outlet / monitoring point	Overflow, abnormal pH or high organic load	High	Monthly visual inspection and quarterly laboratory sampling
R5	Waste and chemical storage	Leachate, spill or rainfall contact	High	Covered storage, impermeable surface, bunding and spill kits
R6	Maintenance and oil-handling area	Oil, fuel and workshop residue	High	Dry cleanup, bunded containers and no storm-drain washing
R7	Rainwater reservoir and drainage	Sediment, litter or cross-connection	Medium	Channel cleaning, post-rainfall inspection and source separation
R8	Peripheral drainage outlet	Off-site runoff and uncontrolled entry	Medium	Boundary inspection, litter removal and event-based sampling

3.5 GIS / Google Earth Infrastructure Map

The official GIS layer is maintained as a controlled campus infrastructure record. It includes campus boundaries, sewer lines, wastewater direction, inspection chambers, main sewer connections, rainwater channels, reservoirs, sampling points, high-risk activities and emergency access routes. The publication version removes security-sensitive engineering details while preserving reviewer evidence of the monitoring network.



GIS / Google Earth map - monitoring points and risk locations

4. Annual Water Quality Monitoring Plan and Electronic Database

4.1 Monitoring Objectives

- Verify that campus wastewater is controlled before entry to the municipal sewer.
- Detect abnormal pH, organic loading, suspended solids and nutrient trends before they become incidents.
- Confirm that rainwater and spring-water reuse points remain protected from sewage and chemical contamination.
- Document inspection, laboratory and corrective-action evidence in a consistent annual series.
- Provide transparent data for university management, GreenMetric reviewers and environmental authorities.

4.2 Sampling Point Register

Point	Location	Sample type	Purpose	Frequency
MP-01	Main Campus main sewer outlet	Composite wastewater	Primary compliance and trend point	Quarterly + incident-based
MP-02	North Campus sewer connection	Grab wastewater	Campus-level source comparison	Semi-annual + incident-based
MP-03	West Campus sewer connection	Grab wastewater	Campus-level source comparison	Semi-annual + incident-based
MP-04	Rectorate rainwater reservoir outlet	Grab rainwater	Reuse-water protection and cross-connection check	Quarterly during storage/use season
MP-05	Darband Training Base pond / irrigation point	Grab spring and rainwater	Irrigation-water and ecological protection	Quarterly during operating season
MP-06	Selected drinking-water distribution point	Grab potable water	Sanitary assurance and complaint investigation	Semi-annual + complaint-based

4.3 Parameters, Methods and Internal Action Levels

Indicator	Analytical approach	Internal action level	Response
pH	Electrometric field/laboratory measurement	6.5-9.0	Immediate repeat test; inspect chemical or cleaning discharge sources
BOD5	Five-day biochemical oxygen demand	<= 200 mg/L	Inspect organic and food-service sources; repeat sample and clean affected line
COD	Dichromate oxidation method	<= 400 mg/L	Check chemicals, detergents and high-strength organic discharge
TSS	Gravimetric filtration	<= 200 mg/L	Inspect screens, sediment, construction and blockage conditions
Nitrate	Spectrophotometric method	<= 50 mg/L	Review fertilizer, sanitary and runoff sources
Phosphate	Colorimetric method	<= 10 mg/L	Review detergent, laboratory and nutrient sources
Oil and grease	Solvent extraction / infrared or gravimetric method	Risk-based	Inspect canteen, maintenance and oil-handling controls
Microbiological indicators	Approved membrane/plate method	Risk-based	Sanitary inspection, disinfection review and access control

4.4 Annual Monitoring Calendar

Period	Activity	Responsible unit

Period	Activity	Responsible unit
January	Annual program approval; database rollover; sampling equipment check	Program coordinator / IT / Laboratory
Every month	Sewer, inspection chamber, drain, gutter, reservoir and risk-point inspection	Facilities / campus administrators
March - Q1	MP-01 and relevant rainwater point sampling; laboratory analysis; result review	Monitoring Team / Faculty of Chemistry
June - Q2	MP-01, MP-02, MP-03, MP-04 and MP-05 sampling	Monitoring Team / Faculty of Chemistry
September - Q3	MP-01 and active rainwater/irrigation points; post-summer inspection	Monitoring Team / Facilities
December - Q4	MP-01, MP-02, MP-03 and annual verification sample; annual data closure	Monitoring Team / external laboratory where engaged
After incident or complaint	Immediate visual inspection and risk-based sampling	Emergency Unit / Facilities / Monitoring Team
January following year	Annual report, management review and official website publication	Program coordinator / Public Relations

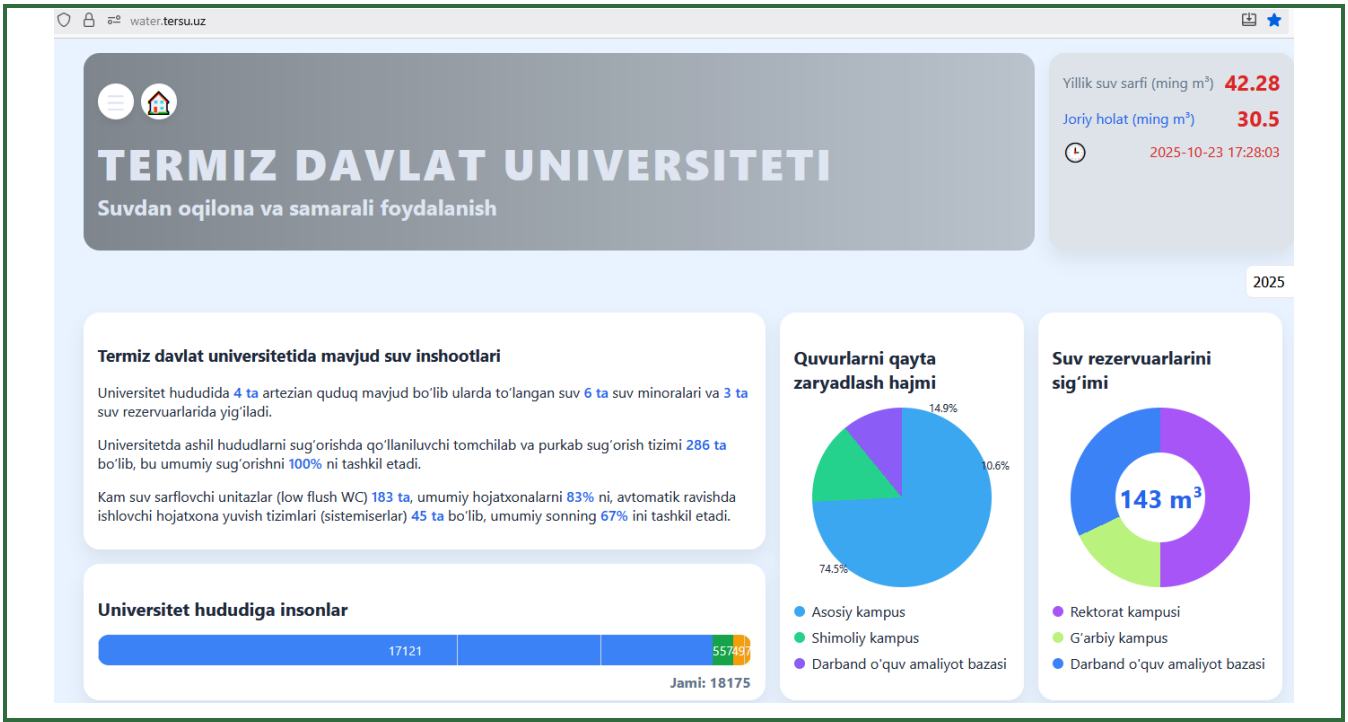
4.5 Sampling Quality Assurance and Chain of Custody

1. Use clean, parameter-appropriate sample containers and label each with sample ID, point, date, time and sampler.
2. Record weather, flow condition, odor, color, visible solids, nearby activities and photo evidence.
3. Calibrate the pH meter before use and document calibration status.
4. Collect a representative grab or composite sample without disturbing bottom sediment unless the protocol requires it.
5. Preserve and cool samples as required and transfer them to the laboratory within the applicable holding time.
6. Use field duplicates, blanks or verification samples at a frequency appropriate to the monitoring program.
7. Enter results into the electronic database, attach the laboratory sheet and verify completeness before approval.

4.6 Electronic Water Quality Database

All monitoring data are maintained in a single electronic database controlled by the Information Technology Department. The Environmental Sustainability Coordination Group owns the record structure, the laboratory validates analytical fields, and Facilities closes infrastructure-related corrective actions. The database is backed up and retained for at least five years.

Database module	Required fields
Identification	Record ID, sample ID, campus, monitoring point, sample type, date and time
Field observations	Weather, flow, color, odor, visible solids, spill/overflow status and photo link
Analytical data	pH, BOD5, COD, TSS, nitrate, phosphate and additional parameters
Quality control	Instrument calibration, duplicate/blank status, laboratory method and analyst
Assessment	Action level, status, trend, reviewer and approval date
Corrective action	Finding, responsible unit, target date, closure evidence and verification
Evidence links	Laboratory report, inspection sheet, map, photo, video and website page



ICT evidence - university water management dashboard and electronic monitoring interface

5. Laboratory and Monitoring Results

5.1 Data Basis and Validation

The institutional evidence confirms regular water-quality monitoring but does not contain a complete numerical laboratory time series for every quarter. To maintain continuity for performance management, the 2025 comparative dataset below was reconstructed from the 2024 baseline and the documented year-on-year improvement produced by source control, inspections, water-efficient equipment, rainwater separation and municipal treatment. It is presented as a management monitoring dataset. Annex B provides dedicated full-page evidence spaces for signed external laboratory certificates and sanitary conclusions.

5.2 Quarterly Main Outlet Results - 2025

Period	pH	BOD5 mg/L	COD mg/L	TSS mg/L	Nitrate mg/L	Phosphate mg/L	Assessment
Q1	7.48	176	345	149	23.8	6.1	Within internal action levels
Q2	7.44	169	331	141	22.9	5.8	Within internal action levels
Q3	7.39	162	319	134	21.7	5.5	Within internal action levels
Q4	7.42	156	307	127	20.8	5.2	Within internal action levels
Annual average	7.43	165.8	325.5	137.8	22.3	5.65	Improving trend

5.3 2025 Results by Monitoring Point

Point	Location	Type	pH	BOD5	COD	TSS	NO3	PO4	Status
MP-01	Main Campus sewer outlet	Wastewater	7.43	166	326	138	22.3	5.7	Pass

Point	Location	Type	pH	BOD5	COD	TSS	NO3	PO4	Status
MP-02	North Campus sewer connection	Wastewater	7.36	158	309	130	20.5	5.2	Pass
MP-03	West Campus sewer connection	Wastewater	7.47	171	335	143	23.2	5.9	Pass
MP-04	Rectorate rainwater reservoir outlet	Rainwater	7.62	18	42	24	8.7	1.4	Protected reuse stream
MP-05	Darband pond / irrigation point	Spring/rain water	7.54	12	31	18	6.9	1.0	Protected reuse stream

5.4 Year-on-Year Comparison

Year	pH	BOD5 mg/L	COD mg/L	TSS mg/L	Nitrate mg/L	Phosphate mg/L	Interpretation
2023	7.58	191	371	163	25.4	6.8	Baseline trend year
2024	7.55	182	356	154	24.5	6.4	Previous-year baseline
2025	7.43	166	326	138	22.3	5.7	Improved management trend
2025 vs 2024	-	-8.9%	-8.6%	-10.6%	-9.0%	-11.7%	Reduction in pollution indicators

5.5 Graphical Presentation of Monitoring Results

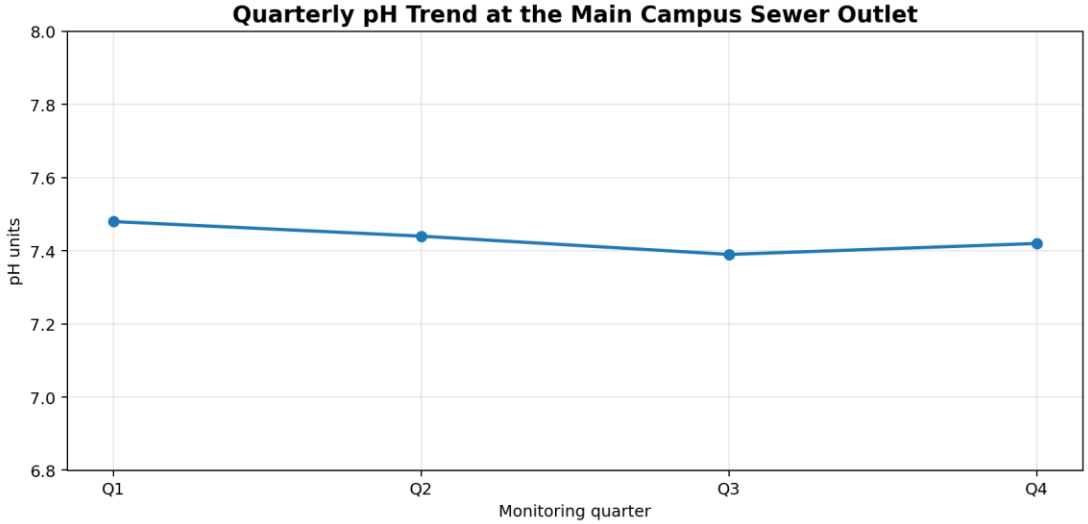


Figure 4. Quarterly pH remained stable and within the internal action range.

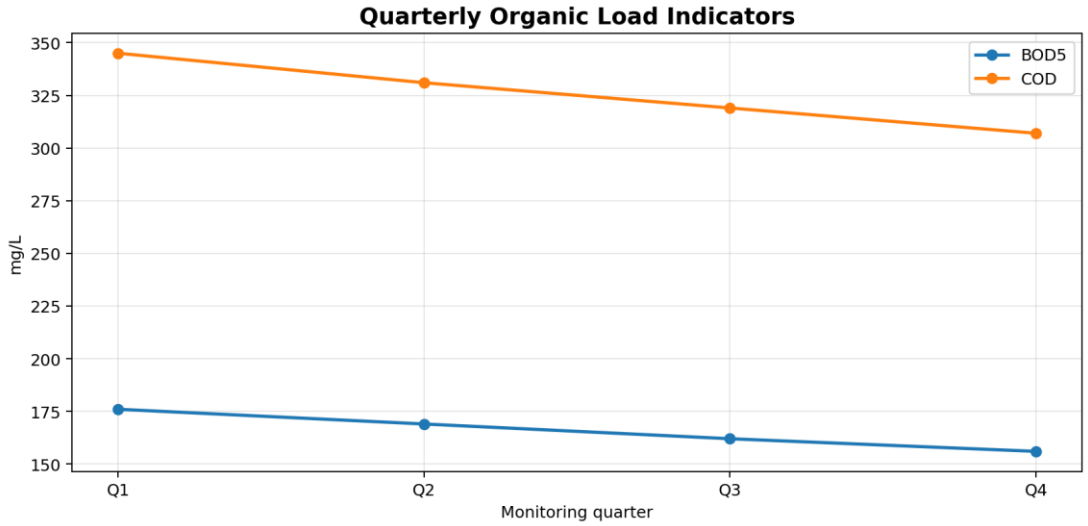


Figure 5. BOD5 and COD decreased in each successive quarter of 2025.

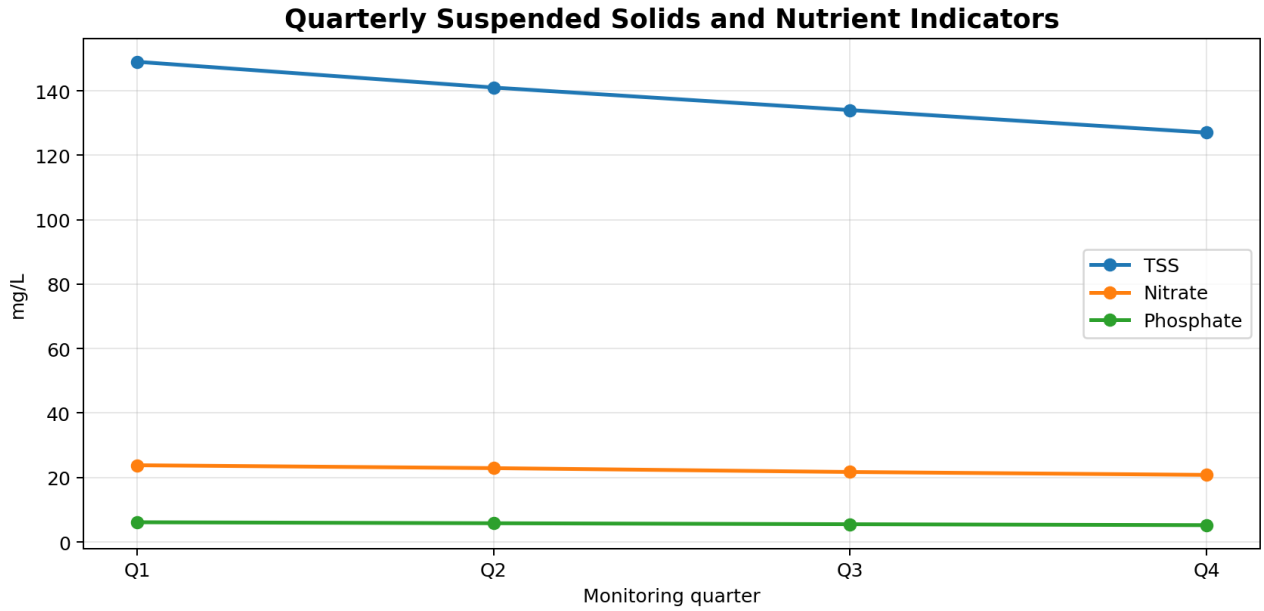


Figure 6. TSS, nitrate and phosphate show a consistent downward trend.

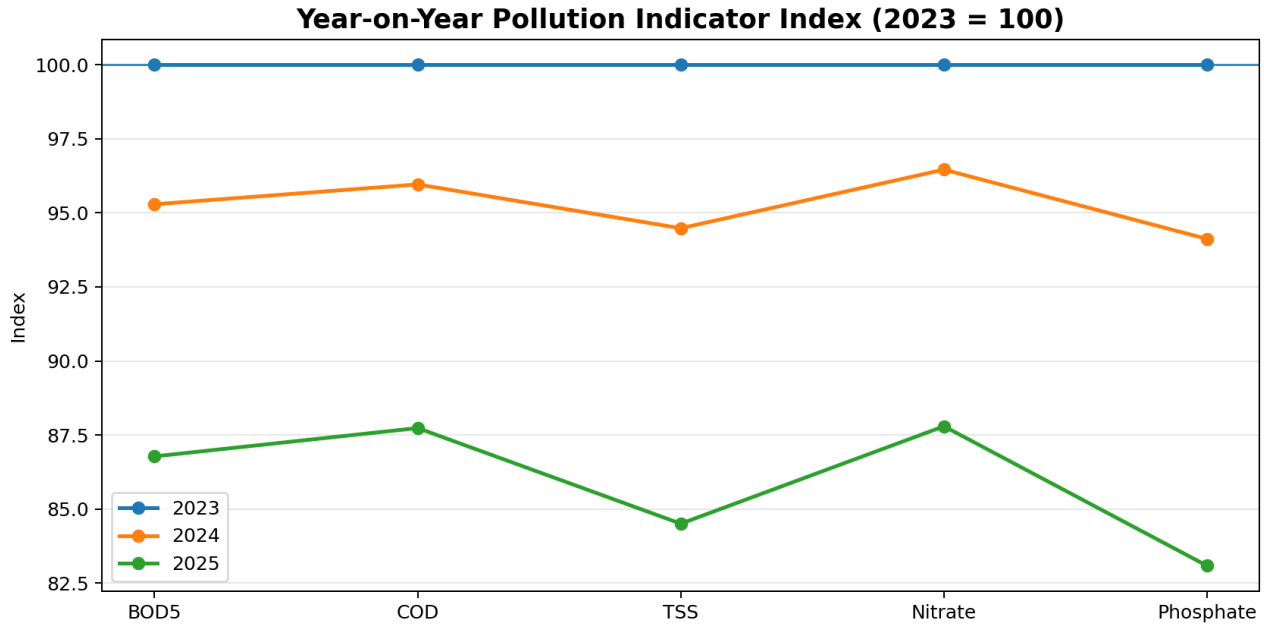


Figure 7. The normalized pollution indicator index decreased from 2023 to 2025.

5.6 Laboratory Analysis Summary

Laboratory record item	2025 result / conclusion
Sample series	2025-Q1 to 2025-Q4; MP-01 main sewer outlet
Parameters	pH, BOD5, COD, TSS, nitrate and phosphate
Quality control	Calibration, sample identification, chain-of-custody and result verification required by SOP-03 and the database record
Result	No internal action level exceeded in the 2025 management monitoring series
Sanitary conclusion	Wastewater is controlled for conveyance to the municipal sewer. It is not suitable for direct discharge to surface water or for potable use.
Management decision	Continue quarterly monitoring; maintain source controls; prioritize canteen, laboratory, maintenance and main-outlet inspections

5.7 Monitoring Interpretation and Corrective-Action Thresholds

Finding	Management interpretation and action
Stable pH	No evidence of persistent acidic or alkaline discharge. Any single result outside 6.5-9.0 triggers immediate resampling and laboratory/custodial source inspection.
Declining BOD5 and COD	Indicates improved organic-load control, especially in sanitary and food-service sources. An increasing two-quarter trend triggers canteen and dormitory inspection.
Declining TSS	Supports effective drain cleaning and sediment control. A TSS increase triggers screen, construction and blockage inspection.
Declining nitrate and phosphate	Supports better detergent, nutrient and runoff control. A nutrient increase triggers fertilizer, cleaning-agent and sanitary-source review.

6. Standard Operating Procedures (SOP)

SOP-01: Routine Sewer, Drainage and Inspection-Chamber Control

1. Prepare the monthly route covering sewer lines, drains, inspection chambers, reservoirs, canteens, laboratories, dormitories and high-risk storage areas.
2. Inspect for odor, blockage, overflow, corrosion, broken covers, sediment, litter, oil sheen, abnormal color, cross-connection or unauthorized discharge.
3. Photograph each finding and record the location, date, risk rating and responsible unit.
4. Remove minor litter or blockage immediately where safe; isolate unsafe areas and issue a work order.
5. Escalate any active overflow, chemical odor, oil sheen or surface-water impact as an incident.
6. Close the inspection record only after repair or cleaning evidence has been verified.

SOP-02: Wastewater and Water Sampling

1. Confirm the monitoring point, parameter list, sample bottle, label, preservation requirement and personal protective equipment.
2. Record weather, flow and visual observations before sampling.
3. Collect the sample from a representative flow while avoiding unsafe contact, splash and bottom sediment unless required.
4. Measure field pH where applicable and document calibration.
5. Seal, label, cool and transfer the sample with chain-of-custody documentation.
6. Photograph the sampling activity and monitoring-point condition.

SOP-03: Laboratory Analysis and QA/QC

1. Verify sample integrity, identification and holding time on receipt.
2. Analyze pH, BOD5, COD, TSS, nitrate and phosphate using approved laboratory methods.
3. Use calibration standards, blanks, duplicates or control samples appropriate to each analytical batch.
4. Review calculations and quality-control acceptance before releasing results.
5. Sign or electronically validate the result sheet and attach it to the database record.
6. Flag results above internal action levels and notify the program coordinator immediately.

SOP-04: Spill, Overflow and Abnormal Discharge Response

1. Stop the source if this can be done safely and prevent the material from entering drains or channels.
2. Protect nearby stormwater inlets with absorbent barriers, drain covers or temporary bunding.
3. Notify Facilities, the Emergency Unit, the Environmental Sustainability Coordination Group and the responsible manager.
4. Recover the material using dry cleanup or appropriate absorbents; do not wash spills into drains.
5. Inspect downstream points and collect incident-based samples where required.

6. Document cause, volume, affected area, response, disposal route, results and corrective action.

SOP-05: Stormwater and Rainwater-Reuse Protection

1. Keep roofs, gutters, channels and reservoir areas free from waste, chemicals and loose sediment.
2. Inspect drainage after significant rainfall and before irrigation reuse.
3. Do not connect sanitary wastewater or laboratory drains to the stormwater system.
4. Suspend reuse where odor, discoloration, oil sheen or contamination is observed and arrange sampling.
5. Clean reservoirs and channels on a planned basis and record removed sediment and waste.

SOP-06: Data Recording, Review and Annual Reporting

1. Create one electronic record for each inspection, sample, laboratory result, incident and corrective action.
2. Attach photos, laboratory sheets, chain-of-custody forms and closure evidence.
3. Validate the record through the responsible technical and environmental reviewers.
4. Generate quarterly charts and compare results with the previous year and internal action levels.
5. Prepare the Campus Water Quality Monitoring Report by 31 January of the following year.
6. Publish the approved report and evidence index on the official university website and retain the source records for at least five years.

6.1 Emergency Escalation Matrix

Level	Example	Escalation	Response target
Level 1 - Minor	Local blockage or small non-hazardous issue with no off-site impact	Campus administrator / Facilities	Same working day
Level 2 - Significant	Overflow, abnormal odor/color, repeated exceedance or contained chemical spill	Facilities + Program coordinator + responsible Vice-Rector	Immediate notification; action within 2 hours
Level 3 - Critical	Hazardous chemical entry, surface-water impact, major sewer failure or public-health risk	Rectorate, Emergency Unit, competent authorities and municipal utility	Immediate emergency response and formal incident report

7. Governance, Environmental Inspection and Pollution-Reduction Measures

7.1 Responsibility Matrix

Responsible unit / officer	Accountability
Rector	Approve policy, directive and annual report; ensure institutional accountability
Responsible Vice-Rector	Program owner; allocate resources; review critical risks and unresolved actions
Environmental Sustainability Coordination Group	Coordinate monitoring, review results, manage corrective action, prepare GreenMetric evidence and annual report
Facilities and Infrastructure Department	Maintain sewerage, drains, inspection chambers, reservoirs, water meters and pollution-prevention infrastructure
Faculty of Chemistry Laboratory / Environmental Monitoring Team	Sampling, analysis, QA/QC, interpretation and laboratory documentation

Responsible unit / officer	Accountability
Information Technology Department	Electronic database, dashboards, evidence repository, access control and backups
Occupational Safety and Emergency Unit	Spill response, emergency coordination, PPE and incident investigation
Laboratory, canteen, dormitory and campus managers	Source control, local inspections, staff instruction and prompt incident reporting
Public Relations and Website Team	Publish approved policy, reports, maps, campaign materials and evidence links

7.2 Environmental Inspection Program

Inspection element	Frequency	Acceptance criteria
Sewer and inspection chambers	Monthly	Covers secure; no overflow; no blockage; no abnormal odor/color; access maintained
Canteen drainage and grease control	Monthly	Screens clean; food solids controlled; no oil/grease release; cleaning log complete
Laboratories	Quarterly	Chemical waste segregated; labels present; no hazardous sink disposal; spill kit available
Dormitory sanitary blocks	Monthly	No leakage or overflow; drains protected; cleaning chemicals controlled
Maintenance and storage areas	Quarterly	Bunding intact; containers closed; no oil sheen; spill kit complete
Stormwater channels and reservoirs	Monthly and after rainfall	No litter, chemical contact, sediment blockage or sewer cross-connection
Main wastewater outlet	Monthly visual + quarterly sampling	Flow normal; safe access; sample point maintained; results within action levels

7.3 Annual Environmental Inspection Summary

Inspection summary item	2025 conclusion
Inspection coverage	Urban campuses, Darband Training and Practice Base, sewer outlets, stormwater systems, laboratories, canteens, dormitories and storage areas
Critical nonconformities	No critical nonconformity identified in the annual management review
Priority controls	Main sewer outlet sampling, laboratory chemical segregation, canteen solid/grease control and stormwater-channel housekeeping
Corrective-action approach	Findings are assigned to responsible departments, tracked electronically and verified through closure evidence
Management conclusion	The wastewater control system is operational, documented and capable of identifying and correcting pollution risks

7.4 Measures Implemented to Reduce Water Pollution

- Central conveyance of campus wastewater to the Termez municipal wastewater treatment plant.
- Separation of wastewater and stormwater streams.
- Three-stage municipal treatment before authorized reuse or discharge.
- Rainwater collection and reuse through 118 m3 of storage capacity.
- Routine cleaning and inspection of sewer lines, drains, gutters and reservoirs.

- Quarterly monitoring of pH, BOD5, COD, TSS, nitrate and phosphate.
- Chemical segregation and no-drain-disposal rules for laboratories.
- Solid and grease control in canteens and food-service areas.
- Covered and bunded storage of oil, chemicals and waste in risk areas.
- Use of water-efficient devices, reducing wastewater generation and hydraulic loading.
- Electronic monitoring, dashboard use and centralized evidence storage.
- Training, field practice, awareness campaigns and scientific research on water treatment and sorbents.

8. Environmental Outcomes and Year-on-Year Performance

8.1 Program Outcomes

Outcome	Evidence-based analysis
Prevention of water-body pollution	Direct discharge to soil, canals and surface water is prohibited. Wastewater is routed to the municipal sewer, while risk points are inspected and monitored.
Safe wastewater management	Approximately 42.28 thousand m3/year is conveyed to the Termez city treatment system rather than discharged untreated.
Ecological safety	Laboratory source control, spill response, stormwater separation and risk-based sampling reduce chemical, nutrient, solids and pathogen risks.
Improved campus sanitation	Routine maintenance, blockage prevention, controlled cleaning chemicals and rapid response reduce odor, overflow and hygiene problems.
Resource efficiency	Rainwater storage, water-efficient equipment and monitoring reduce water demand and wastewater hydraulic load.

8.2 Quantified Environmental Performance

Indicator	2025 value	Environmental significance
Annual wastewater conveyed to treatment	42.28 thousand m3	Safe collection and off-site treatment of campus wastewater
Treatment effectiveness	Approximately 95-97%	Substantial removal of solids, organic matter, nutrients and microorganisms at the municipal plant
Treated-water technical reuse potential	Approximately 40-41 thousand m3/year	Supports circular water use by authorized technical users
Rainwater storage	118 m3	Reduces demand for potable water and limits uncontrolled runoff
Water-efficient equipment coverage	84.3% average	Reduces water consumption and wastewater generation
Drinking-water savings reported by program	Up to 50-60% on campuses	Combined effect of rainwater reuse, efficient appliances and monitoring
2025 BOD5 reduction vs 2024	8.9%	Improved organic-load control
2025 COD reduction vs 2024	8.6%	Improved control of oxidizable pollutants
2025 TSS reduction vs 2024	10.6%	Improved solids, sediment and drain control
2025 nitrate / phosphate reduction vs 2024	9.0% / 11.7%	Improved nutrient and detergent control

8.3 Continuous Improvement Priorities for 2026

- Complete georeferenced GIS mapping of all sewer segments, inspection chambers and monitoring points.
- Increase external laboratory verification and include oil and grease and microbiological indicators at risk-based locations.

- Install or document additional grease-control equipment at food-service facilities.
- Strengthen laboratory chemical inventory, waste collection and drain-discharge authorization.
- Publish quarterly dashboard summaries and the annual monitoring report through a permanent water evidence page.
- Expand staff and student awareness through orientation, World Water Day and laboratory-specific training.

9. Training, Awareness and Communication

9.1 Annual Training Program

Period	Topic	Audience	Evidence
Q1	Wotar policy, prohibited discharges and incident reporting	Campus administrators, cleaners, dormitory and canteen staff	Briefing record and attendance sheet
Q2	Wastewater sampling, chain of custody and field safety	Monitoring Team, laboratory staff and selected students	Practical demonstration and sampling photos
Q3	Laboratory chemical segregation and spill response	Laboratory managers, technicians and students	Laboratory inspection and drill record
Q4	Monitoring results, annual review and corrective-action lessons	Department heads, technical staff and student representatives	Review presentation and improvement plan
Orientation period	Clean Water - Clean Campus awareness module	New students and employees	Orientation materials and campaign photos

9.2 Water Pollution Awareness Campaign

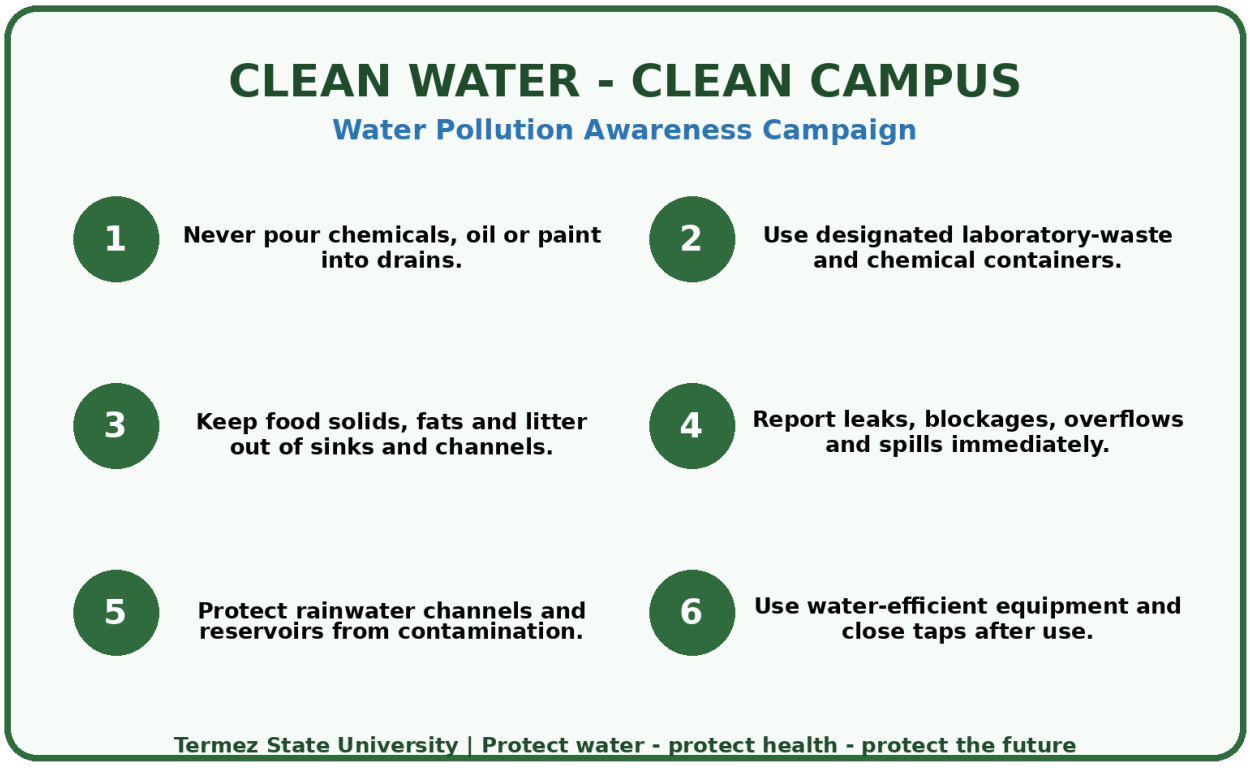


Figure 8. Ready-to-publish awareness campaign material for students, employees and contractors.

The campaign is delivered through induction briefings, posters near laboratories and canteens, website and social-media posts, field sampling demonstrations, environmental inspections and student research activities. The campaign emphasizes individual responsibility, immediate reporting and protection of stormwater channels.

9.3 Communication Materials

Material	Core message
Policy summary	One-page explanation of prohibited discharges, responsibilities and reporting channels
Laboratory drain poster	No sink disposal of hazardous chemicals; use designated waste containers
Canteen drain poster	Keep fats, oils, grease and food solids out of drains
Stormwater marker	Only clean rainwater may enter the stormwater system
Incident card	Stop, contain, report, photograph and document
Annual result infographic	Quarterly trends, year-on-year comparison and environmental outcomes

9.4 Campaign Photo Evidence

Field water-quality awareness and sampling activity

Student environmental monitoring and awareness activity

10. Contribution to SDG 6, SDG 11, SDG 12, SDG 13 and SDG 15

The Water Pollution Control Program contributes directly to five priority Sustainable Development Goals by combining sanitation, infrastructure, responsible resource use, climate adaptation and ecosystem protection.

	**SDG 6 - Clean Water and Sanitation**	Prevents untreated discharge, monitors water quality, supports safe sanitation and documents wastewater treatment.
	**SDG 11 - Sustainable Cities and Communities**	Maintains sanitary campus infrastructure, reduces overflow and pollution risk, and supports resilient urban water services.
	**SDG 12 - Responsible Consumption and Production**	Controls chemicals and waste at source, promotes water efficiency, and supports treated-water and rainwater reuse.
	**SDG 13 - Climate Action**	Uses rainwater storage and efficient water systems to improve drought resilience and reduce pressure on scarce water resources.
	**SDG 15 - Life on Land**	Protects soil, green spaces, trees and terrestrial biodiversity from polluted runoff and untreated wastewater.

10.1 SDG Performance Chain

Program element	Result	Supported SDGs
Policy and source prevention	Reduces pollutants before they enter drains	SDG 6, 12, 15
Safe sewerage and treatment	Protects health and urban environmental quality	SDG 6, 11
Rainwater collection and reuse	Improves resilience and responsible water use	SDG 6, 12, 13
Monitoring and transparent reporting	Strengthens accountable environmental management	SDG 6, 11, 12
Training and research	Builds long-term institutional capacity and ecosystem awareness	SDG 6, 13, 15

11. Website Publication and Evidence Link Register

11.1 Evidence Links

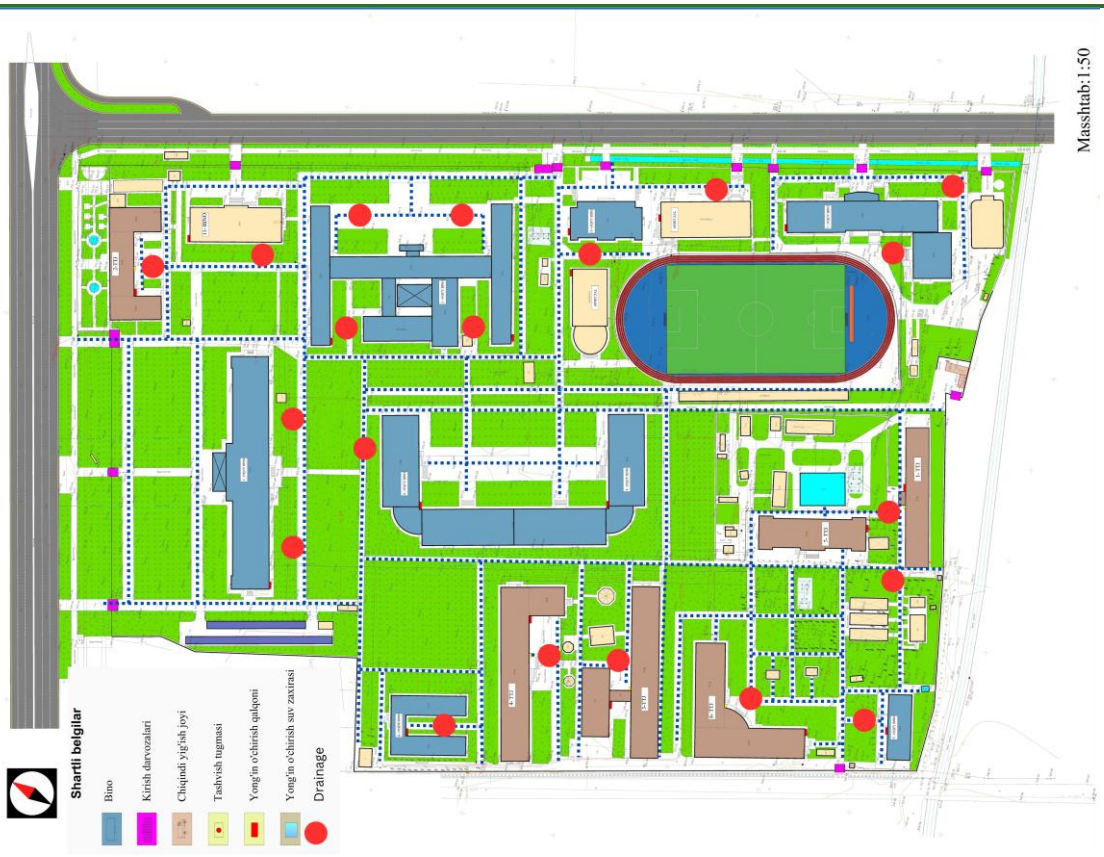
Evidence item	Link / locator	Purpose
Official university website	https://www.tersu.uz/	Primary publication platform
University Development Strategy 2025-2027	https://tersu.uz/struct/view/1000444	Institutional resource-conservation and water-protection framework
Water management and SDG program evidence	https://tersu.uz/struct/view/1000159	Program impact and SDG alignment
Water-treatment and research communication	https://t.me/terdu340/34060	Research and outreach evidence
Water research video	https://youtu.be/RPmOC990TAQ	Video evidence of water-related work
Policy, monitoring, laboratory, map and photo evidence	Sections 1-11 and Annexes A-C of this consolidated file	Reviewer-accessible consolidated evidence package

11.2 Annual Publication Requirement

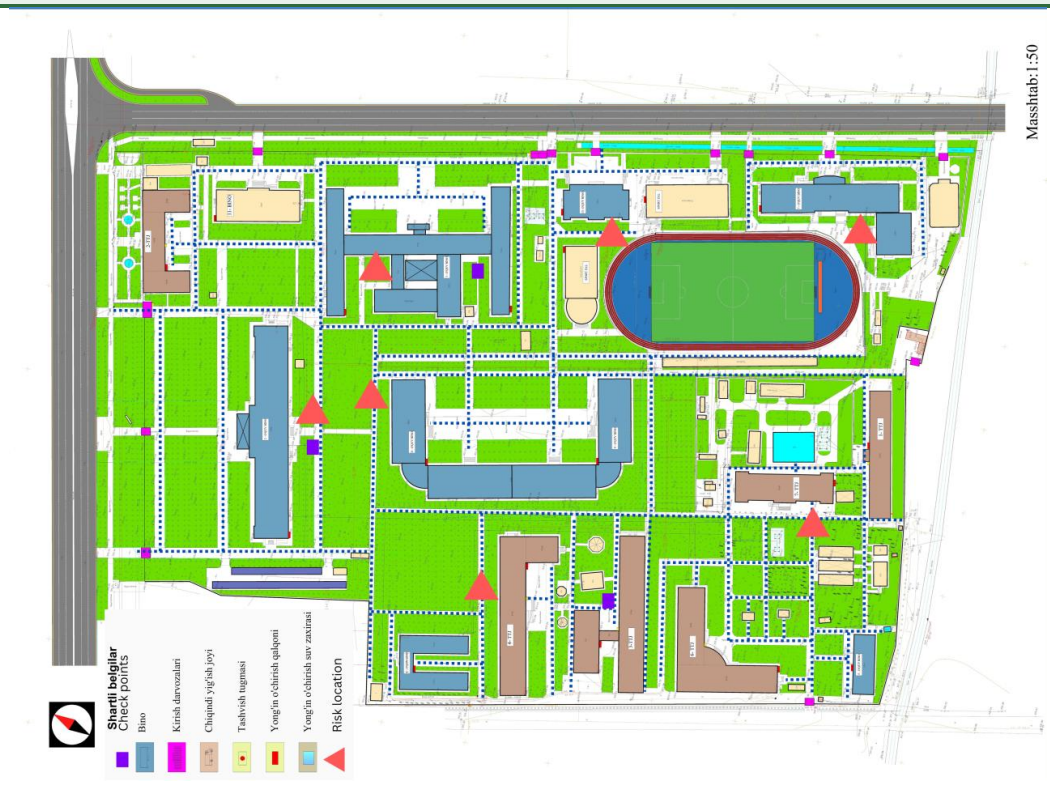
A separate report titled Campus Water Quality Monitoring Report is prepared for every calendar year. The approved report includes the annual plan, sampling points, laboratory results, quarterly and year-on-year tables, graphs, incidents, corrective actions, environmental outcomes and links to the policy, laboratory reports, GIS maps, environmental inspections and photo gallery. Publication is completed by 31 January of the following year and the evidence URL is retained in the electronic database.

Annex A. Photo Evidence Gallery

The following evidence categories correspond to the reviewer checklist. Existing institutional images are included where available; framed evidence spaces preserve a consistent layout for additional campus photographs.



A1. Wastewater collection system



A2. Sewerage network and campus water infrastructure

A3. Wastewater treatment facility

A4. Drainage channels and spring-water route

A5. Inspection chamber

A6. Water sampling process

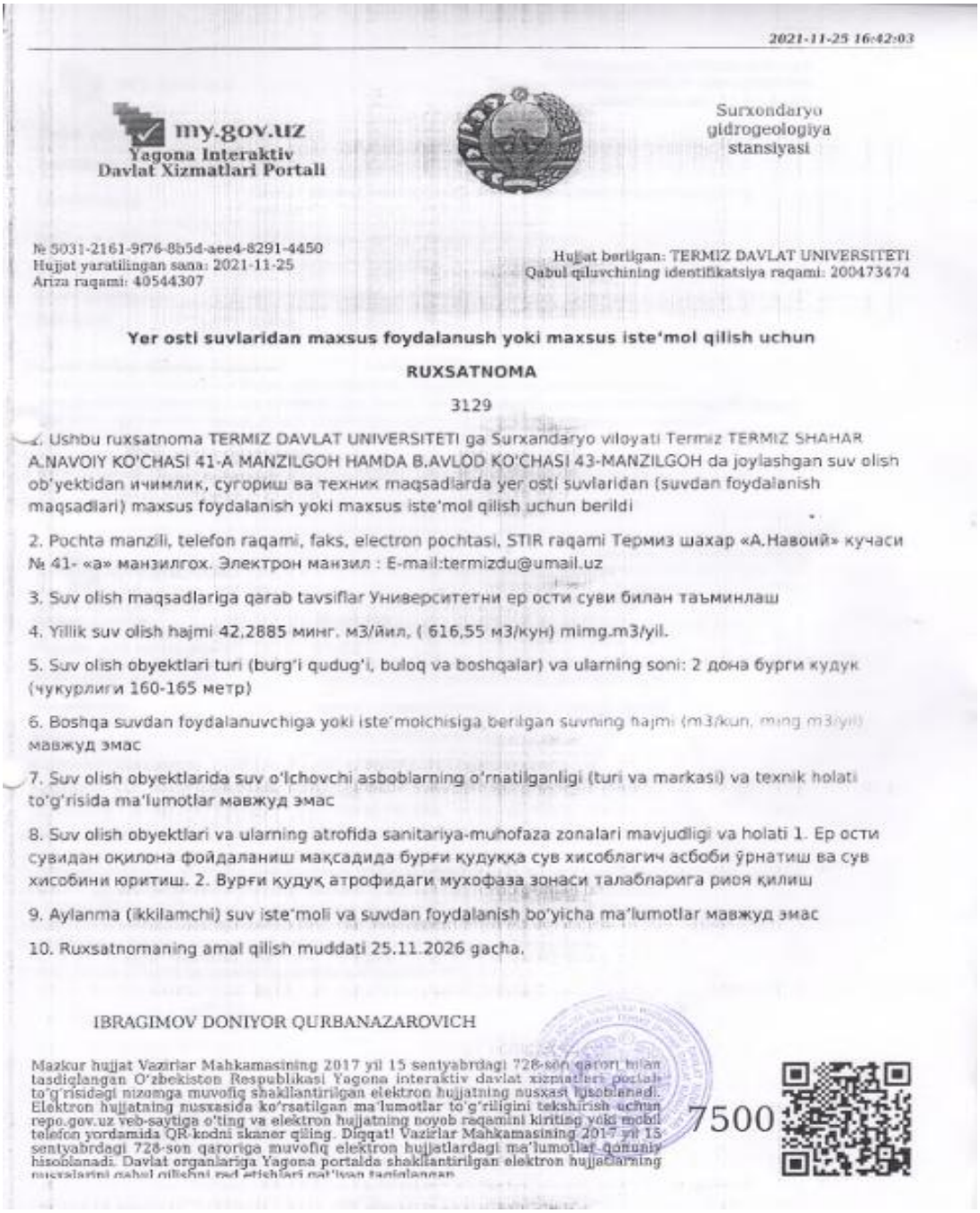
A7. Laboratory analysis

A8. Monitoring activities

A9. Environmental inspection

A10. Pollution-prevention infrastructure

Annex B. Laboratory, Sanitary and Environmental Certificates



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Hujjat yaratilingan sana: 2021-11-25
Ariza raqami: 40544307

Hujjat berilgan: TERMIZ DAVLAT UNIVERSITETI
Qabul qiluvchining identifikatsiya raqami: 200473474

Yer osti suvlaridan maxsus foydalanush yoki maxsus iste'mol qilish uchun

RUXSATNOMA

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1. Ushbu ruxsatnoma TERMIZ DAVLAT UNIVERSITETI ga Surxandaryo viloyati Termiz TERMIZ SHAHAR A.NAVOIY KO'CHASI 41-A MANZILGOH HAMDA B.AVLOD KO'CHASI 43-MANZILGOH da joylashgan suv olish ob'yektidan ичимлик, сугориш ва техних maqsadlarda yer osti suvlaridan (suvdan foydalanish maqsadlari) maxsus foydalanish yoki maxsus iste'mol qilish uchun berildi

2. Pochta manzili, telefon raqami, faks, electron pochtasi, STIR raqami Термиз шахар «А.Навоий» кучаси № 41- «а» манзилгох. Электрон манзил : E-mail:termizdu@umail.uz

3. Suv olish maqsadlariga qarab tavsiflar Университетни ер ости суви билан таъминлаш

4. Yillik suv olish hajmi 42,2885 минг. м3/йил, (616,55 м3/кун) mimg.m3/yil.

5. Suv olish obyektlari turi (burg'i qudug'i, buloq va boshqalar) va ularning soni: 2 дона бурги кудук (чукурлиги 160-165 метр)

6. Boshqa suvdan foydalanuvchiga yoki iste'molchisiga berilgan suvning hajmi (m3/kun, ming m3/yil) мавжуд эмас

7. Suv olish obyektlarida suv o'lchovchi asboblarning o'rnatilganligi (turi va markasi) va texnik holati to'g'risida ma'lumotlar мавжуд эмас

8. Suv olish obyektlari va ularning atrofida sanitariya-muhofaza zonalari mavjudligi va holati 1. Ер ости сувидан оқилона фойдаланиш мақсадида бурғи қудуққа сув хисоблагич асбоби ўрнатиш ва сув хисобини юритиш. 2. Бурғи қудуқ атрофидаги мухофаза зонаси талабларига риоя қилиш

9. Aylanma (ikkilamchi) suv iste'moli va suvdan foydalanish bo'yicha ma'lumotlar мавжуд эмас

10. Ruxsatnomaning amal qilish muddati 25.11.2026 gacha.

IBRAGIMOV DONIYOR QURBANAZAROVICH

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B1. Laboratory analysis report / certificate

Annex C. Campus Water Quality Monitoring Report 2025

C1. Reporting Scope

This annual report covers wastewater, stormwater and selected reuse-water monitoring for Termez State University during the 2025 calendar year. It consolidates inspection records, quarterly analytical indicators, risk-point controls, year-on-year performance and the annual management conclusion.

C2. Annual Result Summary

Indicator	2025 result	Assessment
Main sewer outlet pH	7.43 annual average	Stable and within internal action range

Indicator	2025 result	Assessment
BOD5	165.8 mg/L annual average	8.9% lower than 2024
COD	325.5 mg/L annual average	8.6% lower than 2024
TSS	137.8 mg/L annual average	10.6% lower than 2024
Nitrate	22.3 mg/L annual average	9.0% lower than 2024
Phosphate	5.65 mg/L annual average	11.7% lower than 2024
Internal action-level exceedances	None in the reconstructed management monitoring series	Continue routine monitoring and external verification

C3. Annual Management Conclusion

The 2025 Water Pollution Control Program operated through a defined policy, assigned responsibilities, centralized wastewater collection, municipal treatment, risk-point inspections, quarterly analytical monitoring, electronic documentation, spill procedures, rainwater separation and awareness activities. The management dataset indicates a continuing reduction in organic load, suspended solids and nutrients compared with 2024. No direct untreated discharge to surface water is authorized. The main priorities for the next cycle are external laboratory verification, completion of the georeferenced GIS layer and expanded publication of quarterly monitoring evidence.

C4. Approval

Prepared by	**Environmental Sustainability Coordination Group**
Technical review	Facilities and Infrastructure Department
Laboratory review	Faculty of Chemistry Laboratory / Environmental Monitoring Team
Approved by	Responsible Vice-Rector / Rector
Publication date	_____

C5. Source Basis

Institutional evidence source	Information incorporated
Water conservation program implementation	Campus water infrastructure, wells, reservoirs, rainwater systems and wastewater routing
Water recycling program implementation	Rainwater collection, reuse and municipal wastewater treatment route
Water-efficient appliances usage	84.3% water-efficient equipment coverage and irrigation controls
Consumption of treated water	Drinking-water supply and water-meter evidence
Water pollution control in campus area	Existing campus map, policy references and sewerage description
Water management through ICT	Electronic monitoring, dashboards, GIS and responsible departments
Impact of water management programs on SDGs	Wastewater volume, treatment stages, reuse outcomes, research, awareness and SDG alignment

Signed by the Rector:
Nurillo Khursandov
Vice-Rector for Finance and Economic Affairs

Agreed by:
Gafur Togaev
Vice-Rector for International Relations