

KARADENİZ TECHNICAL UNIVERSITY - WASTE DISPOSAL AND STORAGE POLICY -

PURPOSE OF THE POLICY

This policy has been prepared in order to ensure that all wastes (organic, inorganic, recyclable and hazardous wastes) generated as a result of activities within KTU are stored safely, regularly and in accordance with the law, temporary storage periods and conditions are determined, stored wastes are transferred to licensed disposal facilities and risks to the environment and human health are minimized. The policy aims to systematize and monitor waste storage, minimize waste and landfill-related damages, and reduce risks to human health.

INTEREST OF THE POLICY

Relevant Sustainable Development Goals (SDG) Criteria: This policy is primarily related to the following goals from the United Nations Sustainable Development Goals:

- SDG 3: Healthy Individuals
- SDG 6: Clean Water and Sanitation
- SDG 11: Sustainable Cities and Communities
- SDG 12: Responsible Production and Consumption
- SDG 15: Life on Land

Relevant Metrics:

- THE Impact Rankings
- UI GreenMetric

SCOPE OF POLICY

The policy covers studies and research on the temporary storage and disposal of organic, inorganic, recyclable and hazardous waste produced in all campuses and affiliated units of KTU.

Target Audience: Academic and administrative units, academic and administrative staff, students, on-campus businesses, visitors, and contractors are among the target audience of this policy.

Application Areas: The principles of this policy are applied in administrative and academic buildings and all other areas in all campuses of KTU; hospitals, practice hotels, student dormitories, lodgings, cultural and sports facilities, laboratories and research centers.

BASIC PRINCIPLES AND LEGAL BASES

KTU adheres to the following basic principles:

- **Waste Separation and Storage:** Wastes are collected by separating them according to their types at the place where they are produced and stored temporarily in a safe manner. Hazardous and non-hazardous waste are stored in separate containers without mixing with each other.
- **Storage Periods:** Hazardous wastes are stored in the temporary storage area for a maximum of 180 days; non-hazardous wastes are stored for a maximum of one year; they are sent to licensed waste processing facilities before the expiration of the period.
- **Labeling and Recording:** Each waste taken to the temporary storage area is identified with a label containing information such as waste code, whether it is hazardous or not, risk characteristics and date of entry into the storage area; waste entry-exit records are kept.
- **Temporary Storage Area Features:** The storage area will be covered, protected from external influences and unauthorized access; the floor is covered with impermeable material, grid systems and absorbent materials are available against leaks and spills.
- **Liability and Insurance:** A person responsible for the storage area is appointed; necessary insurance studies are carried out for waste storage areas.
- **Training and Safety:** Personnel are trained on safety, use of personal protective equipment, and emergency procedures in storage and disposal operations. Emergency response plans are prepared for fire, leak or accident situations.

- **Legal Compliance:** The policy is compatible with Environmental Law No. 2872, Zero Waste Regulation, Medical Waste Control Regulation and Hazardous Waste Control Regulation.

RESPONSIBILITIES AND ROLES

- **Rectorate and Senate:** Responsible for approving the policy, providing the necessary budget and infrastructure, and monitoring performance indicators.
- **Environmental Problems Application and Research Center (UYGAR):** Monitors the inventory related to waste disposal and storage with the Zero Waste Coordination Unit. It supports the development of zero waste management plans of the relevant units and conducts reports on-campus analyses with the relevant units when necessary.
- **Zero Waste Coordination Office:** Ensures the establishment of waste storage areas throughout the campus and supervises their compliance with standards and supports the units to act in accordance with zero waste management plans. Collect and report relevant data.
- **Department of Construction and Technical Affairs (YİTDB):** Provides physical planning of storage areas, construction of closed areas, ground impermeability and sealing measures; establishes leak collection and fire extinguishing systems.
- **Farabi Hospital Waste Management Unit:** Ensures the implementation of relevant standards for the collection, transportation, temporary storage and disposal of medical and hazardous wastes; manages the collection of medical wastes in durable, lidded bags and containers with the international bio-hazard emblem on them, the accumulation of sharps in drill-resistant boxes and their safe storage.
- **Academic and Administrative Units and Zero Waste Commissions:** Determines the need for storage space in the units; follows the appropriate areas or containers for temporary storage of waste; tracks the data of the wastes and reports them to the Zero Waste Coordination Office and Environmental UYGAR.

APPLICATION STEPS

1. **Evaluation of Existing Storage Areas:** Existing waste collection and storage areas on all campuses are examined and deficiencies (coverage, labeling, security) are identified; risk analysis is made.
2. **Establishment and Improvement of Storage Infrastructure:** Separate closed warehouses or containers are established for hazardous and non-hazardous waste; the floor is covered with impermeable material, and a grid leak collection system is created. Hazardous wastes are planned to be stored for a maximum of 180 days and non-hazardous wastes for a maximum of one year; A digital recording system is developed for time tracking. Appropriate labeling and color-coding system is used according to waste types; Labels include waste code, hazard status, and date of entry. Physical barriers (locked doors, camera system) will be installed around the storage area to prevent unauthorized entry.
3. **Registration and Insurance Processes:** Landfill managers record every waste entry and exit; regardless of the amount of hazardous waste stored throughout the year, financial liability insurance is renewed and reported to the provincial directorate.
4. **Training and Awareness Programs:** Regular trainings are provided to temporary storage area managers and waste management personnel; seminars and awareness programs on "Waste Storage and Safe Disposal" are organized for all staff and students.
5. **Collection and Disposal Planning:** The transfer of waste to licensed waste processing facilities is planned before the temporary storage period expires; hazardous waste transportation documents and MOTAT (Mobile Waste Transportation System) records are kept.
6. **Emergency Management:** Action plans are prepared to be implemented in case of leakage, fire or other emergency; absorbent materials and fire extinguishing equipment are kept in storage areas.
7. **Continuous Monitoring and Improvement:** The Zero Waste Coordination Office periodically audits the compliance of storage processes; plans corrective and preventive actions for non-conformities detected in audits; and makes improvements to reduce waste and increase recycling rates.

PERFORMANCE INDICATORS

Indicator	Goal	Source of Verification
Hazardous waste landfill standard compliance rate	70% compliance by 2030	CIVILIZED Zero Waste Coordination Office audit reports YİTDB Reports
Compliance rate of hazardous waste with storage period (% of waste sent within 180 days)	70% compliance by 2030	Environmental Problems UYGAR Zero Waste Coordination Office audit reports Storage area records, transport minutes
Compliance rate of non-hazardous waste with storage period (% of wastes sent within 1 year)	70% compliance by 2030	Environmental Problems UYGAR Zero Waste Coordination Office audit reports Storage records
Rate of labeled and recorded waste	Achieve 80% compliance by 2030	Storage records
Annual training participation rate of storage area managers	Achieve 60% compliance by 2030	Training records
Completeness of emergency equipment and safety equipment of temporary storage areas	Achieve 60% compliance by 2030	Site inspection reports

AUDIT AND REPORTING

1. **Monitoring Frequency:** Performance indicators are evaluated annually; indicators related to water consumption are regularly monitored by the relevant responsible units every year. The changes in the values in the indicators during the year are determined and necessary measures are taken in a timely manner.
2. **Reporting Frequency:** Annual data is recorded in KTU Sustainability Reports within six months following the end of the relevant year and shared with the public on the university's website. Four-year data is compiled to form an input for the next strategic planning period. In addition, the relevant data obtained each year is reported to UI GreenMetric and other international sustainability indices.
3. **External Verification:** Participation in national and international certification programs is provided to certify the performance of the university within the framework of the relevant indicators. The participation program and decision are taken by the senate. The implementation and effects of the policy are verified through audits carried out by independent organizations.
4. **Revision Conditions:** In case 60% of the targeted values of the determined performance indicators cannot be reached for two consecutive years or in case of changes in national/international legislation; the policy is reviewed by the implementing units, revision proposals are prepared, and the policy is submitted to the senate for approval again.

VALIDITY DATE

This policy comes into effect from the date it is approved by the KTU Senate. University units are obliged to comply with and implement the provisions of the policy.