



## Waste disposal program

NAO "Kazakh Agrotechnical University named after S.Seifullin"

Infrastructure Management and Maintenance Department

Approve

Chairman



of the Management Board-Rector

Tireuov K.M.

02. 2023.

### PROGRAMS

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**INFRASTRUCTURE MANAGEMENT AND MAINTENANCE  
DEPARTMENT**

Astana, 2023.



## PREFACE

**1 DEVELOPED AND INTRODUCED Infrastructure Management and Maintenance Department**

**2 APPROVED AND PUT INTO EFFECT** by the Chairman of the Board-Rector, Order No. \_\_\_\_\_ from \_\_\_\_\_ 2023.

**3 DEVELOPERS:**

- Chief of Staff – Zhazykbaeva Zh.M.

- Director of DUiOI – Kuzerbaev R.D.

- Manager of DUiOI – Abeldinova Sh.D.

**4 THE DEADLINE FOR THE FIRST INSPECTION IS** 2028.

**THE FREQUENCY OF VERIFICATION is** 5 years

**5 DATE OF INTRODUCTION** \_\_\_\_\_ 202\_\_ .



## **1 Scope of application**

This program is aimed at accounting and control over the formation, collection, accumulation, transportation, reuse, disposal and disposal of waste.

Compliance with the requirements of this program is mandatory for all employees of KATU.

## **2 Regulatory references**

This program uses references to the following regulatory documents:

the Law of the Republic of Kazakhstan dated 09.12.2004 No. 8 "On Environmental Protection" and "On Production and consumption waste".

Sanitary rules "Sanitary and epidemiological requirements for the collection, use, application, neutralization, transportation, storage and disposal of production and consumption waste" dated December 25, 2020 No. KR DSM-331/2020.

MS ISO 9001:2015 Quality Management Systems. Requirements;

WITH QMS 1.1011 - 2020 Quality Management System. The standard of the organization. General requirements for the construction, presentation and documentation of a quality management system;

WITH QMS 01.1014 - 2017 Quality Management System. The standard of the organization. Rules for the development, approval and approval of the regulations on the division;

## **3 Designations and abbreviations**

The following abbreviations are used in this program:

DUiOI - Department for Infrastructure Management and Maintenance

KazATU named after S. Seifullin – Kazakh Agrotechnical University named after S.Seifullin

OPP – production and consumption waste

TB and OT – occupational safety and health

RK - Republic of Kazakhstan

MSW- solid household waste

OS – fixed assets

CO – standard of the organization

PUO – waste disposal program

## **4 Responsibility and authority**

4.1 The Director of the Infrastructure Management and Maintenance Department is responsible for the implementation of all stages of the PO .

4.2 The Chairman of the Management Board - Rector of S.Seifullin KATU approves the PUO.



4.3 The project of the PUO is coordinated with the Chief of Staff, the Director of the Department for Infrastructure Management and Maintenance.

4.4 The decision on the final version of the draft is made by the Chief of Staff, who notes in the "Approval Sheet" (Appendix A).

4.5 The responsibility for bringing to the attention of the relevant employees of the unit approved by the PUO is borne by the head of the unit. The record of the familiarization should be made out in the "Familiarization Sheet" (Appendix B).

## **5 General information**

The program of production and consumption waste management in the NAO "S.Seifullin KATU" (hereinafter — the program) was developed in accordance with the Law of the Republic of Kazakhstan dated 09.12.2004 No. 8 "On Environmental Protection" and "On production and consumption waste", Sanitary rules "Sanitary and epidemiological requirements for collection, use, application, neutralization, transportation, storage and disposal of production and consumption waste" dated December 25, 2020 No. KR DSM-331/2020.

The program defines the legal basis for the management of production and consumption waste in order to prevent harmful effects on human health and the environment, the involvement of waste in economic turnover as additional sources of raw materials.

The Program establishes the order of accounting and control over the formation, collection, accumulation, transportation, reuse, disposal and disposal of waste.

Compliance with the requirements of this program is mandatory for all employees of KATU.

All waste according to the degree of environmental impact is divided into the following hazard classes:

Class I — extremely dangerous

Class II — highly dangerous

Class III — moderately dangerous

Class IV — low-risk

Class V — practically non-dangerous

The activities of the university departments should be aimed at reducing the volume (mass) of waste generation, the introduction of waste-free technologies, the conversion of waste into secondary raw materials, the production of any products from them, minimizing the formation of waste that is not subject to further processing, and their placement in accordance with current legislation.

The waste management program is an integral part of the environmental permit.

This Waste Management Program has been developed in accordance with the principle of hierarchy and contains information on the volume and composition of waste generated, methods of their accumulation, collection, transportation, neutralization, recovery and disposal, as well as a description of proposed



measures to reduce waste generation, increase the share of their reuse, recycling and disposal.

### **5.1 General information about the waste management system**

The waste management system is the main information link in the environmental management system at the enterprise and has the following objectives:

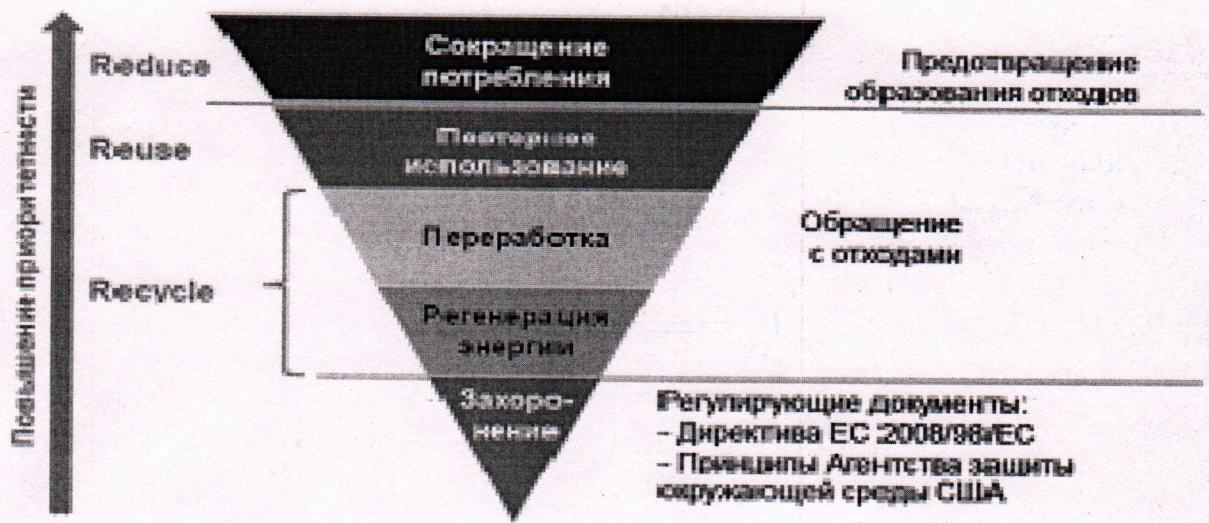
- reducing the negative impact of production and consumption waste on the environment in accordance with the requirements of the Environmental Code of the Republic of Kazakhstan;
- systematization of the processes of formation, disposal and neutralization of all types of waste in accordance with the current regulatory documents of the Republic of Kazakhstan.

The concept of waste management is based on the so-called concept of "3Rs" - reduce (reduction), reuse (reuse) and recycling (recycling). The most preferable is, of course, the complete prevention of emissions or their reduction, further down the hierarchy, followed by reuse, recycling, energy waste disposal and destruction.

The work of any organization inevitably entails the formation of production and consumption waste (OPP) and creates a problem of their placement, disposal or disposal. The first legislative document in the field of waste management is the Directive of the European Union 75/442/EEC of July 15, 1975, which for the first time formulated and legislated the principles of waste management, the so-called Hierarchy of waste management. Safe waste management, taking into account international experience, is based on the following basic principles (Article 329 of the Environmental Code of the Republic of Kazakhstan):

- prevention of waste generation (reducing their quantity and harmfulness by using a closed production cycle);
- waste disposal until the full extraction of the useful properties of substances (reuse of raw materials);
- safe disposal of waste;
- priority of disposal before their placement;
- exclusion of non-recyclable waste (hazardous, toxic, radioactive) from economic turnover;
- disposal of waste without causing harm to public health and damage to the environment.





When applying the principle of hierarchy, the precautionary principle and the principle of sustainable development, technical capabilities and economic feasibility, as well as the overall level of impact on the environment, human health and socio-economic development of the country should be taken into account.

The management system provides for nine stages of the technological cycle of waste:

**Stage 1** - the appearance of waste occurring in technological and operational processes, as well as from objects during their liquidation;

**Stage 2** - collection and (or) accumulation of waste, which must be carried out in designated places on the territory of the owner or other authorized territory;

**Stage 3** - identification of waste, which can be visual

**Stage 4** - sorting, separation and (or) mixing of waste according to certain criteria into qualitatively different components;

**Stage 5** - certification. The passport of hazardous waste is compiled and approved by individuals and legal entities, in the course of whose economic activities hazardous waste is generated;

**Stage 6** - waste packaging, which consists in ensuring the integrity and safety of waste during their sorting, loading, transportation, warehousing, storage in established places by means of laying in containers or other containers, packaging, briquetting with appropriate labeling;

**Stage 7** - storage and transportation of waste. Storage should be carried out in designated (authorized) places where waste is collected in special containers. Transportation of waste should be carried out in a specially equipped transport,



eliminating the possibility of losses along the route and environmental pollution, as well as providing convenience when overloading;

**Stage 8** - waste storage. Depending on the type of waste, storage can be open, under a canopy, in containers, mines or other authorized places;

**Stage 9** - waste disposal. At the first stage of recycling, defective or obsolete products, their components and waste from them can be processed by developing (unbundling), remelting, using other technologies to ensure recycling (recovery) of organic and inorganic components, metals and metal compounds for reuse in the national economy, as well as with the elimination of newly formed waste. The second sub-stage of the technological cycle for the elimination of hazardous and other wastes is their safe placement at the appropriate landfills or destruction.

Waste generated during normal operation due to their insignificant and gradual accumulation is not immediately taken to the places of their disposal, but is collected in numbered containers and stored at sites designated for these purposes. All waste generated at the university is temporarily stored at the sites with subsequent transfer to specialized organizations. Waste management is carried out according to the developed internal instructions for waste management. Contracts for the export and further disposal of all generated production and consumption waste are concluded annually.

The waste management system at the university also includes:

- calculation of waste generation volumes and adjustment of volumes in accordance with the emergence of new waste disposal technologies and improvement of technological processes in the organization
- collection and storage of waste in special containers or containers for temporary storage of waste
- waste disposal for disposal/recycling and disposal sites according to developed and agreed schedules
- registration of documentation for the removal of waste indicating the volume of waste exported
- registration of information on waste disposal in the accounting logs and database in the organization
- conclusion of contracts for the removal of waste generated from the territory of the organization.

**Waste inventory**



An inventory of waste at the university facilities is carried out annually, and an established list of all waste generated in the university units is submitted.

The results of the inventory are taken into account when setting strategic environmental goals and, based on them, develop measures for the regeneration, disposal, neutralization, sale and dispatch to specialized enterprises of production waste, which are included in the program for achieving strategic environmental goals.

### **Waste accounting**

Responsible for accounting for all university waste and consumption and the implementation of relationships with specialized organizations is responsible for the OS at the university.

Each division, faculties, departments themselves appoint a person responsible for waste management. The person responsible for waste management, based on the inventory of waste, keeps primary records of the volumes of education, delivery for regeneration, disposal, sale, dispatch to specialized enterprises and placement in landfills of waste generated as a result of the production and economic activities of the production unit.

The person responsible for the OS prepares a summary report and submits a report on hazardous waste to the regional statistical authority, performs calculations of payments for waste disposal in the OS.

### **Waste collection, sorting and transportation**

The order of collection, sorting, storage, disposal, neutralization, sale, disposal of waste and transportation is carried out in accordance with the requirements for waste management, based on their level of danger ("absolutely" safe; "absolutely" dangerous; "Mirror").

At the university, waste collection is carried out separately, in accordance with the requirements for waste management by hazard level, type of waste, methods of sale, storage and disposal of waste. Specially designated places with installed waste collection containers have been allocated for waste collection.

Containers must be labeled and painted in certain colors.

As the container is filled, the transportation of waste is organized by the forces of the unit to the appropriate places of temporary collection and storage at the university.



Waste that cannot be disposed of at landfills or regenerated at the university must be transported to specialized enterprises for disposal, neutralization or burial.

The paperwork for the removal and loading of waste into vehicles is carried out by the person responsible for waste management in the production unit.

Transportation of all types of waste should be carried out by motor transport, eliminating the possibility of losses along the way and environmental pollution.

Transportation of hazardous waste to specialized enterprises and their sale are carried out on a contractual basis.

### **Disposal and disposal of waste**

Disposal and disposal of waste should be carried out in ways in which the impact on human health and the environment does not exceed the established standards, and a minimum amount of newly generated waste is provided.

The disposal of production waste in the divisions of the enterprise is carried out in those directions and volumes that correspond to the existing production conditions.

### **Waste disposal**

Waste disposal is waste treatment aimed at eliminating their danger or reducing the level of danger to an acceptable value.

To eliminate a possible emergency situation associated with the spillage of electrolyte from batteries in a room intended for storage, the necessary amount of lime, soda, water for neutralization is provided.

## **5.2 Analysis of waste management measures**

*The principles of the unified management system are as follows:*

1. Strict accounting of waste generated is carried out at all production facilities of the university. Specialists of the TB department and from the University monitor all processes within the waste life cycle, and helps to establish optimal ways of waste disposal, in accordance with the requirements of the legislation of the Republic of Kazakhstan and international environmental standards.
2. Collection and/or accumulation of waste at the university's production facilities is carried out in accordance with the regulatory documents of the Republic of Kazakhstan. There are specially equipped sites for waste collection, and the necessary number of containers are available.
3. All generated waste is identified and certified with the involvement of specialized laboratories.



4. Packaging and labeling of waste is carried out.
5. The transportation of waste is carried out by specialized licensed organizations.
6. Storage and storage of the generated waste is carried out in specialized containers and specially equipped platforms.
7. To the extent possible, to make secondary use of waste, or their transfer to individuals and legal entities interested in their use.
8. Solid waste disposal is carried out at a specially equipped landfill of a contractor organization.
9. Waste not related to solid waste is transferred to third-party organizations for disposal, disposal, neutralization or processing.

In order to optimize waste management, early conclusion of export contracts for further processing/use/disposal of production and consumption waste with specialized enterprises has been organized, which also reduces or completely eliminates pollution of environmental components.

MSW is exported to the landfill under the contract.

The substances contained in the waste temporarily stored on the territory of the university cannot migrate to groundwater and soil, because their appropriate storage is provided. In this regard, it is not planned to carry out instrumental measurements in places of temporary storage of waste.

The transfer of waste is made out by the act of acceptance and transfer.

Information about the existing waste transfer system of the University:

<b>№</b>	<b>Name of the waste</b>	<b>Where is the waste transferred to</b>
1	Solid household waste	They are transferred to specialized municipal services under a contract for burial at a landfill
2	Waste of repair materials	Exported by third-party organizations on a contractual basis
3	Mercury-containing lamps	Transferred for processing to third-party organizations on a contractual basis
4	Laboratory waste, equipment, reagents	
	Medical waste	

The main results of waste management in dynamics over the past three years are their complete disposal by Contracting Companies.



The analysis of the dynamics of waste generation is carried out according to the reporting data of the University.

## **6 Procedure for making changes**

6.1 Changes to the Software are made only with the permission of the Director of Think and must be documented for his (their) signature.

6.3 Changes to the policy are made by the managers of the DUiOI with a mandatory mark in the "Change Registration Sheet" (Appendix B).

## **7 Storage and distribution**

7.1 Responsibility for the transfer of the approved policy (the original document) for storage in the Department of Corporate Development and Strategy is borne by the Director of the DDiOI.

7.2 A copy of the PUO in electronic format is posted on the University's website "[https://kazatu.edu.kz /](https://kazatu.edu.kz/)".











