



ZERO WASTE MANAGEMENT GUIDELINE

February 2022

1. PURPOSE

The purpose of OSTİM TECHNICAL UNIVERSITY Waste Management Instruction is to control the environmental impacts resulting from the activities of the University, to determine the general procedures and principles regarding the management of the wastes arising from the activities of the persons on the campus, from their formation to their disposal, in accordance with the relevant legislation, without harming the environment and human health, and to determine the duties and powers of the University Management and the responsibilities of the persons in the university in this context.

2. SCOPE AND BASIS

This instruction has been prepared based on the provisions of Articles 11, 12 and 13 of the Environmental Law No. 2872, the "Waste Management Regulation" which entered into force on 02.04.2015, the "Zero Waste Regulation" which entered into force on 12.07.2019 and Article 4 of the Occupational Health and Safety Law No. 6331. All real and legal persons within the borders of OSTİM TECHNICAL UNIVERSITY are covered by this instruction.

3. DEFINITIONS

Region: OSTİM TECHNICAL UNIVERSITY Campus

Participant Real and legal persons and legal entities located within the borders of the UNIVERSITY and registered in the Zone.

Waste: Any substance or material which is, or is required to be, disposed of or deposited in the environment by its producer or the natural or legal person actually in possession of it,

Waste generator: Any person, institution, organisation, organisation and enterprise whose activities cause waste generation and/or any real and/or legal person who performs pre-treatment, mixing or other operations that will cause a change in the composition or structure of the waste,

Waste minimisation: Reducing the amount of waste by measures to be taken according to certain environmental criteria, basic conditions and characteristics in line with the planned prevention activities in production, consumption and service processes,

Waste collection centre: Centres where separately collected wastes are deposited for recycling and/or disposal,

Waste treatment: The recovery or disposal of waste, including pre-treatment and interim storage, as defined in the Waste Management Regulation,

Waste processing plant: A facility that recovers and/or disposes of wastes by the activities in Annex-2/A and Annex-2/B of the Waste Management Regulation, excluding transfer stations, including pre-treatment and interim storage facilities,

Intermediate storage facility: The facility where wastes are safely stored until the amount of waste reaches sufficient capacity before being delivered to pre-treatment, recovery or disposal facilities, **Waste list:** The list given in Annex-4 of the Waste Management Regulation,

Waste management: Prevention of waste generation, reduction at source, reuse, separation according to its characteristics and type, accumulation, collection, temporary storage, transport, interim storage, recycling, recovery including energy recovery, disposal, monitoring, control and supervision activities after disposal,

Waste management plan: A plan containing short and long term programmes and policies prepared to ensure waste management in harmony with the environment,

Waste oil: Used petrol engine, diesel engine, transmission and differential, transmission, grease and other special vehicle oils and hydraulic system, turbine and compressor, slideway, open-closed gear, circulation, metal cutting and processing, metal drawing, textile, heat treatment, heat transfer, insulation and protective, insulation, transformer, mould, mould, steam cylinder, pneumatic system protector, food and pharmaceutical industry, paper machine, bearing and other special industrial oils and industrial greases, used thickener, preservative, cleaner and similar special preparations and oil products that are not suitable for use,

Collection of waste oils: All operations carried out for the purpose of collecting waste oils from their producers by classifying them according to their categories and transporting them to the licensed processing and disposal point by licensed waste carriers,

Waste oil producer: Natural and legal persons who cause the generation of waste oils specified in Annex-1 of the Regulation on the Control of Waste Oils during their activities, and if the source is not known, real and legal persons who keep these wastes in their possession, means.

Separate collection: Separate collection of wastes according to their types and characteristics

Packaging: From raw material to processed product, for transporting, protecting, storing and offering for sale during the delivery of a product from the producer to the user or consumer

all products, including non-recyclable products made from any material used,

Packaging waste generator: Natural or legal persons who cause the generation of packaging waste by using the packaged product,

Accumulator: A source of electrical energy used in industry and vehicles for automatic starting, lighting or ignition power, produced by direct conversion of chemical energy as a result of chemical reaction between lead and sulphuric acid in rechargeable secondary cells,

Ministry Ministry of Environment, Urbanisation and Climate Change,

Buildings and settlements: Self-contained residential, commercial or service buildings and autonomous settlements, including individual buildings with indoor or outdoor social facilities,

Accumulation equipment: Piggy banks, containers and similar equipment where waste is accumulated according to their types,

Biodegradable waste: Biodegradable park and garden waste and food and kitchen waste from homes, offices, restaurants, outlets, canteens, food preparation and food processing facilities,

Domestic solid wastes (garbage) : Commercial, industrial and institutional wastes that do not fall under the concept of hazardous waste and are defined in Annex-4, section 20 of the Waste Management Regulation and originate from households or are similar in content or structure,

Temporary storage: The safe holding of wastes by the waste generator before they are transported to treatment facilities,

Temporary storage area: The area whose criteria are specified in Article 13 of the Waste Management Regulation,

Recycling: Any recovery process by which waste is processed into products, materials or substances for their original intended use or other purposes, including the reprocessing of organic materials, except for energy recovery and the reprocessing of waste for use as fuel or for landfill,

Recovery: The processes listed in Annex 2/B of the Waste Management Regulation, which are involved in making wastes ready for use for a useful purpose in order to replace the substances used in the market or in a facility,

Provincial Directorate Provincial Directorate of Environment, Urbanisation and Climate Change,

Separate collection at source: Separate collection of wastes at the point of generation,

Compost: The material produced by decomposing organic-based wastes in oxygenated or oxygen-free environment,

Polluter pays principle: Expenses incurred for the prevention, limitation and elimination of pollution and degradation and for the improvement of the environment should be borne by those who pollute or cause degradation,

Prevention: Measures to be taken before any substance or material becomes waste in order to reduce the amount of waste by reusing products or extending their useful life, reducing harmful substances in product production and minimising the negative effects of the waste produced on the environment and human health,

Battery: A source of electrical energy produced by direct conversion of chemical energy resulting from chemical reaction in cells,

Zero waste: An approach that aims to protect the environment and human health and all resources by preventing/reducing waste generation in production, consumption and service processes, prioritising reuse, collecting and collecting the generated waste separately at source, and reducing the amount of waste to be sent to disposal by ensuring recycling and/or recovery,

Zero waste certificate: The document, the qualifications of which are determined by the Ministry, to be given to local administrations that establish zero waste management systems and other places defined in Annex-1 list and to those who establish zero waste management systems on a voluntary basis,

Zero waste certificate holder: Places where zero waste certificate is issued,

Zero Waste Information System: The online system created by the Ministry in order to register, document, monitor the places that will implement the zero waste management system and ensure the traceability of the wastes managed within the scope of the system,

Zero waste management system: A management system that includes all the processes of waste reduction, separate accumulation at source, temporary storage, separate collection, transport and processing, starting from the prevention of waste generation, taking into account the benefit and cost factors,

Hazardous waste: Wastes that have one or more of the hazardous characteristics listed in Annex-3/A of the Waste Management Regulation, that have an asterisk (*) next to the six-digit waste code in Annex-4 of the same Regulation, and that have special provisions in their accumulation, collection, transport and processing,

Non-hazardous waste: Wastes that do not have an asterisk (*) in the waste list of Annex-4 of the Waste Management Regulation and do not show hazardous characteristics,

Collection: Transport of wastes from the places where they are accumulated in order to take them to waste treatment facilities,

Collection point: Places where collection equipment is placed for the separate collection of waste,

Collection: Collection of wastes for the purpose of transporting them from places where they are collected separately,

Collection-sorting facility: Waste processing facility where wastes are collected and sorted and separated according to their types,

Reuse: Any process by which products or non-waste components are used for the same purpose for which they were designed,
means.

4. GENERAL PRINCIPLES

The general principles of waste management are as follows:

- Development and utilisation of clean technologies that use natural resources as little as possible,
- Designing and marketing products in a way to minimise damage to the environment and human health during the production, use, recovery or disposal stages,
- It is essential to prevent and reduce waste generation and the hazardous nature of waste by establishing a product environmental design approach to waste generation and hazardous substances contained in waste, with technologies focusing on more durable, reusable and recyclable products.
- In cases where waste generation is unavoidable, it is essential that wastes are reused, recycled and recovered by other processes to obtain secondary raw materials, used as energy sources or disposed of in accordance with the relevant legislation.

- e) During the separate collection, temporary storage, transport and processing of wastes at source, it is essential to use methods and processes that will not pose a risk to water, air, soil, plants, animals and humans, will not cause disturbance through noise, vibration and odour, will prevent the natural environment from being adversely affected and thus will not harm the environment and human health.
- f) In order to separate waste at source, it is essential to remove the bins under the tables and to return to a completely dual collection system.
- g) It is forbidden to collect, sell, recover and/or dispose of wastes for commercial purposes by third parties other than facilities that have obtained permits and/or environmental licences, producers/authorised institutions, waste carriers authorised/licensed to carry waste, and to burn wastes by mixing them with other substances and fuels.
- h) Wastes cannot be directly mixed and/or diluted with any other substance or waste, except for physical, chemical and biological pre-treatments (laboratory chemicals are within this scope).
- i) Temporary storage of wastes is carried out within the borders of the region where the waste is produced.
- j) Persons, institutions and organisations responsible for the generation and management of waste are obliged to take measures to prevent damage to the environment and human health at every stage of waste management.
- k) It is forbidden to pollute the environment by dumping, direct filling and storage of wastes in soil, seas, lakes, rivers and similar receiving environments.
- l) Wastes are not discharged directly into the sewerage system, are not released directly into the air, are not incinerated at low temperatures, are not mixed with other wastes.

5. OBLIGATIONS OF THE WASTE GENERATOR

Waste Producers;

- a) To take necessary measures to minimise waste production,
- b) Disposable plastic etc. products are not preferred as much as possible,
- c) Reuse packaging materials whenever possible and dispose of them at waste points at the end of their useful life,
- d) Reducing the amount of packaging by ensuring that bulk purchases are made in the raw material procurement process in line with the possibilities, (For example, buying 5

If you buy 1 product with a volume of 5 units instead of 5 units, the amount of packaging material will decrease).

- e) If the packaging materials used in the procurement process have a deposit application, to prefer packaging materials with deposit,
- f) Revise and reuse transport packaging materials such as wooden pallets wherever possible,
- g) Separate collection and temporary storage of waste,
- h) Keeping records in accordance with the principles determined by the Ministry of Environment, Urbanisation and Climate Change for the hazardous wastes it produces and making appropriate packaging and labelling,
- i) Ensuring the separate collection of wastes in the areas of the operating company, not mixing recyclable (paper, metal, glass, plastic) wastes with domestic wastes,
- j) To keep the domestic solid wastes in the places where they are produced in a closed manner so as not to disturb the environment and human health and to make them ready for collection,
- k) Participating in training organisations to be organised by the UNIVERSITY in the waste management process,
- l) Catering establishments that provide catering services and have special table areas belonging to the company must collect the wastes collected at the table separately, and collect recyclable wastes (paper, metal, glass, plastic) separately in blue coloured bags,
are liable.

6. TEMPORARY STORAGE

- a) Recyclable wastes are collected in blue bags and non-recyclable wastes are collected in black bags and left to the designated waste delivery points.
- b) Fluorescent lamps, electronic waste or toner cartridge wastes are delivered to the UNIVERSITY administration. It is forbidden to dispose of them with household rubbish or recyclable waste.
- c) Temporary storage of wastes is carried out within the boundaries of the UNIVERSITY.

7. DOMESTIC SOLID WASTES

a) It is forbidden to throw wastes other than domestic solid wastes into the garbage containers. If hazardous wastes are disposed of together with household wastes, it will not be possible for the UNIVERSITY to collect the wastes collected in black bags.

8. PACKAGING WASTE

a) Regardless of the material used and the source of generation, packaging wastes generated as a result of consumption must be collected separately from other wastes where they are generated in order to reduce environmental pollution, maximise the use of landfill facilities and contribute to the economy.

b) Waste generators are obliged to give their packaging wastes, which are collected separately in a way that does not cause environmental pollution, to the OSTİM TECHNICAL UNIVERSITY collection system.

c) It is forbidden to dispose of packaging wastes directly or indirectly into the receiving environment in a way that harms the environment and to dispose of them by storing them in landfill sites.

d) It is essential that the expenditures incurred to compensate for any environmental damage arising from the management of packaging wastes are covered by the Waste Producers responsible for the management of these wastes.

e) It is essential that packaging wastes are given to environmentally licensed enterprises. Collection of packaging wastes by persons and/or organisations other than these is prohibited.

f) OSTİM TECHNICAL UNIVERSITY may make agreements with companies that have environmental licences in order to ensure that packaging wastes are processed appropriately.

9. MEDICAL WASTE

- a) To make a protocol with the relevant municipality for the collection, transport and disposal of medical waste,
- b) To prepare and implement the medical waste management plan including separate collection of medical waste, transport and temporary storage of medical waste within the health institution and measures to be taken in case of an accident,
- c) Collecting medical, hazardous, non-hazardous, packaging, municipal waste and other wastes separately at source without mixing them with each other,
- d) Collecting pathological wastes treated with any chemicals separately from other medical waste,

- e) Using the bags and containers whose technical specifications are specified in the Regulation on Medical Waste Control while collecting medical waste,
- f) To deliver their medical waste by obtaining a transport control number through the Ministry of Environment, Urbanisation and Climate Change ECBS-Waste Management Application,
- g) To transport separately collected medical waste to the medical waste temporary storage / container with a container / container / bucket allocated for this purpose only,
- h) To periodically train / ensure the training of the personnel in charge of the management of medical waste,
- i) To immunise its personnel in charge of the management of medical waste, to undergo a health check-up at most every six months and to take other protective measures,
- j) To provide and ensure the use of special protective clothing and equipment of the personnel in charge of the management of medical waste,
- k) To meet the expenses required for the collection, transport, sterilisation and disposal of medical waste,
- l) OSTİM TECHNICAL UNIVERSITY is obliged to regularly record information on the amount of medical waste generated.

10. WASTE BATTERIES AND ACCUMULATORS

Waste Generators using batteries and accumulators;

- a) Keeping the machinery, equipment used during production processes and accumulators used in power supplies and transformers in a sealed place in the work area for more than ninety days until they are delivered to the manufacturer after they become waste, and sending them to licensed companies,
- b) Collecting waste batteries separately from household waste, leaving the collected batteries at the red coloured collection points located in the region, are liable.

11. VEGETABLE WASTE OILS

Waste Producers;

- Collecting vegetable waste oils separately from other waste materials and garbage,
- Using leak-proof, corrosion-resistant collection containers with corrosion-resistant inner and outer surfaces for the collection of vegetable waste oils generated as a result of their activities,
- Delivering vegetable waste oils to the UNIVERSITY management to be included in the OSTİM ORGANISED INDUSTRIAL REGION Zero Waste Management System,
- To make the necessary declarations to the Ministry of Environment, Urbanisation and Climate Change within the framework of the relevant regulation are liable.

12. ZERO WASTE MANAGEMENT SYSTEM AND WASTES WITHIN THIS SCOPE

- Waste Producers are obliged to comply with the Zero Waste Management System established by OSTİM TECHNICAL UNIVERSITY.
- Within the scope of Article-10 of the Zero Waste Regulation, waste generators are obliged to comply with the general principles, to separate, collect and store their wastes according to their types, to deliver the wastes to the Zero Waste Management System established by OSTİM TECHNICAL UNIVERSITY, to keep records and to be included in the zero waste system.
- Recyclable paper, glass, metal, plastic wastes of non-hazardous nature arising from waste generators' activities are collected in different accumulation equipment than other wastes and these wastes are stored in containers designated by OSTİM TEKNİK UNIVERSITY.
- Zero waste containers must be in the colour and marking specified in the regulation. Zero waste collection containers to be provided by the participant are subject to the approval of OSTİM TECHNICAL UNIVERSITY.
- Waste batteries, vegetable waste oil, waste electrical and electronic equipment and other recyclable wastes are collected in accordance with the legislation and delivered to the collection points established by OSTİM TECHNICAL UNIVERSITY, waste collection centre by the Participant.

f) In the accumulation equipment to be used, the colour of the equipment or the labels on the equipment; Blue colour is used in case of accumulation of paper, glass, metal, plastic wastes together, dark grey or black colour is used for other wastes.

g) Waste Generators are obliged to participate in training, seminars, etc. to be organised by OSTİM TECHNICAL UNIVERSITY on separate accumulation of wastes in accordance with the legislation, waste reduction, etc.

h) In enterprises such as cafes and restaurants where packaging waste is generated in large quantities, the packaging waste collected from the tables must be collected separately and left at the collection points without mixing with domestic waste. In case it is detected that packaging wastes are collected together with domestic wastes in such enterprises, administrative sanctions are imposed by OSTİM TECHNICAL UNIVERSITY Management.

i) Within the scope of Zero Waste Management, OSTİM TECHNICAL UNIVERSITY Management may request from Waste Generators to collect separately biodegradable wastes that have not been heat treated in qualified document studies. The collected biodegradable wastes can be used for composting.

PRINCIPLES FOR THE PREVENTION AND MINIMISATION OF WASTE GENERATION

As a minimum for the prevention and minimisation of waste generation;

- It is essential to design, produce and use durable, repairable, reusable and improvable products by developing sustainable production and consumption models in order to use resources efficiently.
- If there is an alternative, it is essential that reusable products are preferred instead of disposable/ disposable products.
- It is essential not to use packaging of more than sufficient volume and weight to ensure the required level of safety and health for the consumer and the packaged product.
- It is essential to repair and reuse products, with priority given to electrical and electronic goods, textiles, furniture, packaging and construction materials.

- e) In order to prevent the generation of food waste, it is essential that necessary measures are taken by the relevant parties throughout the production, supply chain and use of food and that food waste prevention plans are prepared.
- f) It is essential to favour practices that encourage food donation and redistribution of food for human consumption, and to take measures to ensure that food is used primarily for human consumption rather than for animal feed or processed into non-food products.
- g) Without prejudice to the legislation on products and materials, it is essential to take measures to reduce the use of hazardous substances in products and materials.
- h) In particular, it is essential to reduce the generation of waste that is not suitable for reuse or recycling.

13. EFFECTIVENESS

- a) This Instruction takes effect on the date of approval by the decision of **OSTİM TECHNICAL UNIVERSITY SENATE**.
- b) **OSTİM TECHNICAL UNIVERSITY RECTORATE** executes.