INTERNATIONAL STANDARD

ISO 24161

First edition
2022-10

Waste collection and transportation management — Vocabulary

Gestion de la collecte et du transport des déchets — Terminologie

Reference number
ISO 24161:2022(E)

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Published in Switzerland

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Foreword

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The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 297, *Waste collection and transportation management*.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

Introduction

0.1 General

With global waste generation on the rise, municipalities must consider more efficient waste collection and transportation management, including the interoperability and safe use of equipment or technologies.

Hence, it is important to agree on a set of harmonized terms and definitions to provide a common basis for communication and information exchange on waste collection and transportation management. This will help to minimize ambiguity, confusion and misunderstanding of terms used in the waste management industry.

This document enables users to understand the scope of the work of ISO/TC 297 and is the source document for the terms and definitions of ISO/TC 297. Where a term and definition are required in a single document, the term and definition will be referenced in that document.

These terms and definitions will serve as the basis for a common language for regulations, standards, academia, research and training in the waste management industry.

0.2 Vocabulary structure

The arrangement of terms and definitions in this document is based upon terms corresponding to "waste management" and "collection and transportation" in the waste collection and transportation management field. The organization of terms is illustrated in Figure 1.

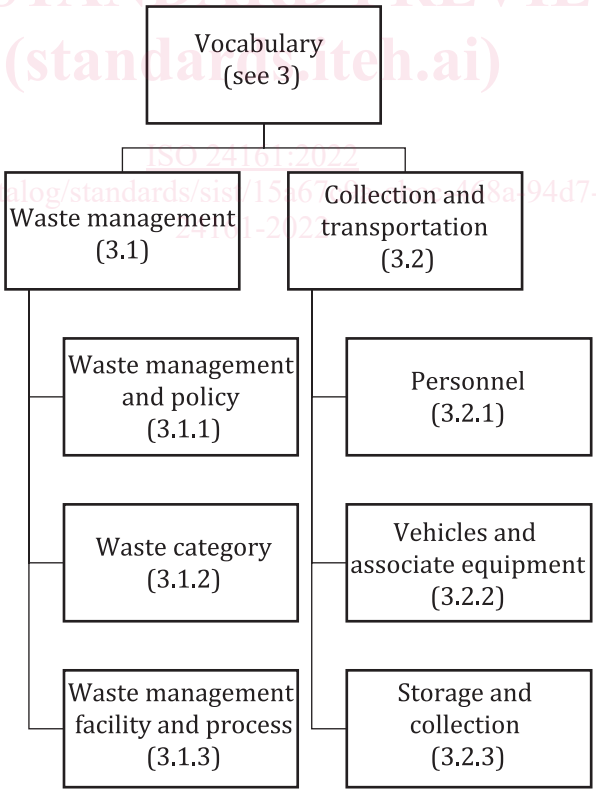

Figure 1 — Vocabulary structure

Waste collection and transportation management — Vocabulary

1 Scope

This document defines terms that are commonly used in the area of waste collection and transportation management. It aims to align with terminology used internationally.

2 Normative references

There are no normative references in this document.

3 Terms and definitions

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at https://www.iso.org/obp

— IEC Electropedia: available at https://www.electropedia.org/

NOTE 'Refuse' and 'waste' are used interchangeably in this document.

3.1 Waste management

3.1.1 Waste management and policy

3.1.1.1
3Rs
reduce, reuse, recycle
three main principles which are widely used in *waste management* (3.1.1.9)

Note 1 to entry: *Reduce*, *reuse* and *recycling* are defined in 3.1.1.6, 3.1.1.8 and 3.1.3.10, respectively.

3.1.1.2
extended producer responsibility
EPR
environmental policy approach in which a producer's responsibility for a product is extended to the post-consumer stage of a product's life cycle

Note 1 to entry: An EPR policy is characterized by:

a) the shifting of responsibility (physically and/or economically; fully or partially) upstream towards the producer and away from government or municipalities;

b) the provision of incentives to producers to take into account environmental considerations when designing their products.

Note 2 to entry: An EPR can be only financial or can be financial and operational depending on national laws.

3.1.1.3
illegal dumping
disposal (3.1.3.3) of *waste* (3.1.2.31) without legal permission, in violation of national laws

3.1.1.4
integrated waste management
well-planned and connected services, including waste collection, storage, *recycling* (3.1.3.10), transfer, treatment and *disposal* (3.1.3.3) activities, resulting in a cost-effective, efficient, functional and environmentally sound waste management system

3.1.1.5
pay-as-you-throw
PAYT
usage-based pricing system for *waste* (3.1.2.31) whereby residents pay a variable waste fee based on the quantity of waste handled

3.1.1.6
reduce
minimize the amount of *waste* (3.1.2.31) produced at source so as to minimize the quantity of waste that needs to be treated or disposed of

Note 1 to entry: Reduction can also include no unnecessary consumption and the use of products that are sustainably designed with less material used.

3.1.1.7
refurbished part
part that is disassembled from waste products or equipment and can be recycled or prepared for *reuse* (3.1.1.8) after inspection, detection and simple treatment

3.1.1.8
reuse
use an object or material again, either for its original or similar purpose, without significantly altering the physical form of the object or material

3.1.1.9
waste management
management of generation, collection, storage, transport, *recycling* (3.1.3.10), recovery and *disposal* (3.1.3.3) of *waste* (3.1.2.31)

Note 1 to entry: Most nations have legislative and regulatory frameworks for waste management. These can differ from nation to nation.

3.1.1.10
waste odour
unpleasant smell caused by *waste* (3.1.2.31) during the whole process of waste collection, transportation and *disposal* (3.1.3.3)

3.1.2 Waste category

3.1.2.1
agricultural waste
waste (3.1.2.31) produced as a result of various agricultural operations

[SOURCE: *OECD Glossary of Statistical Terms*[6], modified — Definition revised.]

3.1.2.2
biomass
material that is derived from living or recently living biological organisms, excluding material embedded in geological formations and/or fossilized

Note 1 to entry: Biomass can be used directly or processed as a fuel source or fertiliser.

3.1.2.3
bulky waste
waste (3.1.2.31) which, because of its size or unwieldiness, does not fit into local waste *containers* (3.2.3.5), waste bags or household *refuse chutes* (3.2.3.9) and is provided separately for collection

3.1.2.4
construction and demolition waste
C&D waste
waste (3.1.2.31) which arises from construction, renovation or demolition activities

3.1.2.5
e-waste
electrical or electronic equipment which is *waste* (3.1.2.31), including all components, sub-assemblies and consumables which are part of the product at the time of discarding

Note 1 to entry: Electrical and electronic products include TVs, computers, laptops, handphones, printers, printed circuit boards, refrigerators, washing machines and audio and video systems.

Note 2 to entry: E-waste contains valuable resources and certain toxic substances.

3.1.2.6
ferrous scrap metals
different alloys containing mainly iron and minor parts of other metals

Note 1 to entry: Ferrous scrap metals can be removed from commingled materials using large magnets.

3.1.2.7
food waste
food that is discarded along the food chain

Note 1 to entry: The food waste that is generated along the food chain from production, distribution, retail and consumption.

3.1.2.8
general waste
waste (3.1.2.31) as defined by national laws

3.1.2.9
glass waste
waste (3.1.2.31) from hard, brittle substances, typically transparent or translucent

Note 1 to entry: Glass is made by fusing sand with soda and lime and cooling rapidly.

EXAMPLE Windows, drinking containers.

3.1.2.10
hazardous waste
waste (3.1.2.31) which can have an adverse impact on human health and safety and/or the environment and requires special treatment and *disposal* (3.1.3.3)

Note 1 to entry: (i) Waste prescribed in accordance with national laws, where the waste has any of the characteristics mentioned in Annex III to the Basel Convention; or (ii) waste that belongs to any category contained in Annex I to the Basel Convention, unless it does not possess any of the characteristics contained in Annex III to the Basel Convention.

[SOURCE: SS 603:2021, 3.3, modified — Note 1 to entry replaced.]

3.1.2.11
horticultural waste
garden waste
tree trunks and branches, plant parts and trimmings generated during the maintenance and pruning of trees and plants

3.1.2.12
household waste
waste (3.1.2.31) arising from household

Note 1 to entry: This definition specifies where the waste stream is generated but not its characteristics.

3.1.2.13
incinerable waste
waste (3.1.2.31) that can be destroyed, rendered inert or reduced to ash through a process of controlled, high-temperature combustion

3.1.2.14
incineration bottom ash
residue of combustion from a furnace or incinerator which comprises mainly silica, ceramic and glass, while containing some ferrous and non-ferrous metals and residual unburnt carbon

Note 1 to entry: Fluidized bed system does not produce bottom ash.

3.1.2.15
incineration fly ash
fine ash generated from an *incineration* (3.1.3.6) process, carried by the combustion gases and collected by a flue gas cleaning system

Note 1 to entry: Fine ash or air pollution control (APC) residue mainly comprises lime hydrate and activated carbon, which are used for flue gas treatment. It also contains carbon and metal oxides.

3.1.2.16
industrial sludge
mixture of water and solids separated using various types of industrial process, excluding sewage sludge

3.1.2.17
industrial waste
solid, liquid or gaseous *waste* (3.1.2.31) produced in the course of, or waste product of, any trade, business, manufacture, construction or other industrial activity, which can include toxic materials and dangerous substances

Note 1 to entry: The legal definition can differ according to national laws.

3.1.2.18
litter
waste (3.1.2.31) of a smaller size that is discarded improperly by an individual in a public environment

3.1.2.19
manufacturing waste
waste (3.1.2.31) generated during the various stages of product manufacturing

3.1.2.20
municipal sewage sludge
dewatered semi-solid material produced by municipal wastewater treatment plant processes

3.1.2.21
municipal solid waste
MSW
waste (3.1.2.31) from households, offices, hotels, malls, trade premises, schools, institutions, food and beverage premises, markets and municipal services, such as street cleaning and maintenance of recreational areas, which municipalities take care of

Note 1 to entry: The legal definition can differ according to national laws.

3.1.2.22
non-incinerable waste
waste (3.1.2.31) which is not incinerable

3.1.2.23
non-ferrous metals
non-magnetic metals

EXAMPLE Aluminium, lead, copper and alloys.

3.1.2.24
organic waste
biological *waste* (3.1.2.31) from plants or animals

3.1.2.25
packaging waste
waste (3.1.2.31) from all products made of any materials of any nature to be used for the containment, protection, handling, delivery and presentation of goods, from raw materials to processed goods, from the producer to the user or the consumer

3.1.2.26
paper waste
discarded paper products

EXAMPLE Mixed paper, white paper, newspaper, cardboard.

3.1.2.27
pathogenic waste
medical or infectious waste
waste (3.1.2.31) that is capable of causing or spreading disease

Note 1 to entry: It includes sharps (i.e. sharp objects, such as discarded needles), microbiological cultures, pathological organs, bedding, bandages and other waste from potentially infectious patients and animals. Such waste typically originates from medical treatments.

Note 2 to entry: The legal definition can differ according to national laws.

3.1.2.28
plastic waste
discarded material which contains as an essential ingredient a high polymer

Note 1 to entry: Plastic waste can be recycled via mechanical recycling, chemical recycling and organic recycling and for energy recovery.

[SOURCE: ISO 472:2013, 2.702, modified — Definition changed and notes to entry replaced.]

3.1.2.29
post-consumer waste
finished product which has served its intended purpose and has been discarded (end-of-life) by the end user for *disposal* (3.1.3.3) and/or recovery

3.1.2.30
recyclable
waste (3.1.2.31) that can be recovered and processed into material for the manufacture of a new product