ACR+

Organics Dictionary and Thesaurus

Standard terminology for the organics sect

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Organics Dictionary and Thesaurus - standard terminology for the organics sector

Background to the organics dictionary and thesaurus

ACR+ identified inconsistent and contradictory terminology within the organic sector, both within and between EU Member States. A desirable outcome for government, industry and market development is adoption of a standard terminology for all actors involved.
Momentum is building for the development of a consistent terminology that resolves a number of issues faced in collection, processing, education and market development within this sector.

Most definitions were collected from the following sources: EU (legislative, parliamentary and policy documents), OECD, ROU Australia (*a considerable number of definitions in this dictionary/ thesaurus were collected from their very comprehensive dictionary/ thesaurus*), EPA US, VNG International,.. .
Other widely available information sources have also been used in the preparation of this document.
Same terms are, in some cases, described more than once. It is left to the reader to make his own interpretation and choice when reading the terms. The sources of terms are identified to facilitate traceability in the development of standardised terminology.
Please note that this document is also a thesaurus. Terms that are in common use, but are not the preferred term are specified, in most of the cases, in the 'synonym' section below the accepted term and definition.

Amendments to the organics classification system will be made in the next draft update.

Background

A

Aerated Static Pile
Forced aeration method of composting in which a free standing pile is aerated by a blower moving air through perforated pipes located beneath the pile.
SYNONYMS: forced aeration; aerated windrow; static pile.
SOURCE: Rynk et al., (1992).

Aeration
The process by which the oxygen deficient air in compost is replaced by air from the atmosphere. Aeration can be enhanced by turning or through the forced delivery of air with a blower fan.
SYNONYMS:
SOURCE: Rynk et al., (1992).

Aerobic
In the presence of, or requiring, oxygen.
SYNONYMS: high oxygen; aerated conditions.
SOURCE: Rynk et al., (1992).

Aerobic
With oxygen. During the composting process, certain bacteria need oxygen to break down the mix of organic materials. This is known as aerobic decomposition.
SYNONYMS: high oxygen; aerated conditions.
SOURCE: US EPA

Anaerobic
In the absence of oxygen, or not requiring oxygen. Composting systems subject to anaerobic conditions often produce odorous compounds and other metabolites that are partly responsible for the temporary phytotoxic properties of compost.
SYNONYMS: low oxygen.
SOURCE: Recycled Organics Unit.

Anaerobic Digestion
An organic treatment system involving the microbial decomposition of organic materials in a solid, semi-solid or liquid phase in the absence of oxygen, converting part of the organic fraction to carbon dioxide and methane. Systems may take the form of covered lagoons, covered stabilisation basins, or completely enclosed agitated or non-agitated towers. Methane recovered needs to be purified to remove carbon dioxide (in most cases) if used as a combustive energy source.
SYNONYMS: anaerobic treatment.
SOURCE: Recycled Organics Unit.

Avoidance
Preventing the generation of waste using practices such as resource conservation and source control.
SYNONYMS: reduction
SOURCE: Standards Australia AS 3831, (1998c).

B

Best Practice
For any area of waste management, this represents the current 'state-of-the art' in achieving particular goals. Best Practice is dynamic and subject to continual review and improvement.
SYNONYMS: industry best practice.
SOURCE: EcoRecycle Victoria, (1999).

Biodegradable
Capable of being decomposed by the action of biological processes.
SYNONYMS: decomposable, compostable.
SOURCE: Standards Australia AS 3831, (1998c)

Biodegradable
Materials that can decompose, usually by bacteria or sunlight, into basic components. Most organic materials (paper, grass clippings, food scraps), under the right conditions, are biodegradable.
SYNONYMS: decomposable, compostable.
SOURCE: US EPA

Biodegradable waste
Any waste that is capable of undergoing anaerobic or aerobic decomposition, such as food and garden waste, and paper and cardboard
SYNONYMS: decomposable waste, compostable waste.
SOURCE: Landfill directive - EU

Biodegradable municipal waste
Biodegradable waste from households, as well as other biodegradable waste, which because of its nature and composition is similar to biodegradable waste from households
SYNONYMS: decomposable municipal waste, compostable.municipal waste
SOURCE: Landfill directive - EU

Biofertiliser
A biofertiliser is a large population of a specific or a group of beneficial microorganisms. These microorganisms are incorporated aseptically into sterile carrier materials such as peat, lignite or charcoal. Such material is generally used for enhancing the productivity of soil either by fixing atmospheric nitrogen or by solubilising soil phosphorus or by stimulating plant growth through synthesis of growth promoting substances.
SYNONYMS:
SOURCE: NRDC India, (2001).

Biofuels
Refers to the market segment within the waste to energy market sector which incorporates:
• Power stations
• Incineration
• Gasification
• Pyrolysis
• Anaerobic digestion
• Bio-reactive landfills
• Ethanol
• Firewood
SYNONYMS:
SOURCE: Recycled Organics Unit

Biogas
A mixture of methane and carbon dioxide gases produced when anaerobic bacteria break down organic waste.
SYNONYMS: landfill gas; anaerobic gas; anaerobic digestion gas; methane.
SOURCE: NSW Waste Boards,(1999).

Biogenic
Emissions that simply close the loop in the natural carbon cycle.
SYNONYMS:
SOURCE: US EPA, (1998).

Biomass
Total weight, volume or energy equivalent of organisms in a given area.
SYNONYMS:
SOURCE: Lawrence, (1989).

Bioremediation
Process by which microorganisms are stimulated to rapidly degrade hazardous organic contaminants to environmentally safe levels in soils, sub-surface materials, water, sludges, and residues.
Also refers to the market segment within the recycled organics market sector which incorporates:
• Contaminated sites and soils
• Water purification
• Biofiltration
SYNONYMS: biodegradation; soil rehabilitation.
SOURCE: Thomas et al., (1992).

Biosolids
Organic solids or semi-solids produced by municipal sewage treatment processes. Solids become biosolids when they come out of an anaerobic digester or other treatment process and can be beneficially used. Until such solids are suitable for beneficial use they are defined as waste-water solids. The solids content in biosolids should be equal to or greater than 0.5% weight by volume (w/v). Biosolids are commonly co-composted with garden organics and/or residual wood and timber to produce a range of recycled organics products.
SYNONYMS: sewage sludge.
SOURCE: NSW EPA, (1997b).

Biowaste
Biodegradable waste and park waste, food and kitchen waste from households, restaurants, caterers and retail remises and comparable waste from food processing plants
SYNONYMS: biodegradable waste
SOURCE: Waste Framework Directive - EU

Bulk Density
Weight or mass per unit of volume of a material comprised of many individual particles. For example, the weight of a pile of wood chips divided by the volume of the pile is the bulk density.
SYNONYMS: density, pile density.
SOURCE: Rynk et al., (1992).

Bulking Agent
An ingredient in a mixture of composting raw materials included to improve the structure and porosity of the mix. Bulking agents are usually rigid and dry and often have large particles (for example, straw or wood chips). The terms “bulking agent” and “amendment” are often used interchangeably. See also composting amendment.
SYNONYMS: bulking amendment.
SOURCE: Rynk et al., (1992).

Byproduct
Excess material or waste produced in addition to the primary product. Sludge is a byproduct from the manufacture of paper, for example. Many manufacturers look for innovative ways to reuse or recycle the byproducts created during the production process to reduce waste.
SYNONYMS:
SOURCE: US EPA

B

C

Capture rate
A percent or ratio relating the amount of recoverable materials that are directed to processes of recycling or composting and the total amount collected.
SYNONYMS: separation rate
SOURCE: VNG International

Carbon Dioxide
An inorganic gaseous compound comprised of carbon and oxygen. Carbon dioxide is produced by the oxidation of organic compounds during composting. Carbon Dioxide is a greenhouse gas with a global warming potential (GWP) of 1. See Global Warming Potential; Greenhouse Gases.
SYNONYMS:CO2
SOURCE: Rynk et al., (1992); US EPA, (1998).

Carbon to Nitrogen Ratio
The ratio of the weight of organic carbon (C) to that of total nitrogen (N) in an organic material.
SYNONYMS: C/N ratio.
SOURCE: Rynk et al., (1992).

Carbon Sequestration
Natural or man-made processes that remove carbon from the atmosphere and store it for extended periods or permanently. A store of sequestered carbon (e.g. forest or soil) is known as a carbon sink.
SYNONYMS:
SOURCE: US EPA, (1998).

CH4
Chemical symbol for methane. Methane is a greenhouse gas with a global warming potential (GWP) 21 times greater than carbon dioxide. See Global Warming Potential; Greenhouse Gases.
SYNONYMS: methane
SOURCE: US EPA, (1998).

CO2
Chemical symbol for carbon dioxide. Carbon Dioxide is a greenhouse gas with a global warming potential (GWP) of 1. See Global Warming Potential; Greenhouse Gases.
SYNONYMS: Carbon Dioxide
SOURCE: Rynk et al., (1992); US EPA, (1998).

Co-composting
A composting process where two or more organic materials are combined to obtain a recipe with an appropriate nutrient balance, moisture content and physical structure for rapid composting to take place.
SYNONYMS: composting.
SOURCE: Recycled Organics Unit.

Collection
A system of gathering, transporting and storing recyclable materials from diffuse sources for processing at a centralised facility.
SYNONYMS:
SOURCE: Recycled Organics Unit.

Collection
Means the gathering of waste, including the preliminary sorting and preliminary storage of waste for the purposes of transport to a waste treatment facility
SYNONYMS:
SOURCE: Waste Framework Directive - EU

Collection coverage
The percentage of the total (household or commercial) waste generating points that have regular waste collection or removal.
SYNONYMS: coverage, effectiveness
SOURCE: VNG International

Commercial waste
Waste which comes from shops, services and other generators which are neither residential nor industrial. Includes in some cases public sector waste.
SYNONYMS: business waste, shop waste, small quantity generator waste
SOURCE: VNG International

Community composting
Means the composting of biowaste by a group of people in a locality (range of contexts, e.g. community gardens, multi-unit dwellings) with the aim of composting their won and other's people's biowaste in order to manage the supplied biowaste as close as possible to the point at which it was produced.

SYNONYMS:
SOURCE: Working document on Biological Treatment of biowaste – EU (adapted by ACR+)

Compost
An organic product that has undergone controlled aerobic and thermophilic biological transformation to achieve pasteurisation and a specified level of maturity. Compost is suitable for the use as soil conditioner or mulch and can improve soil structure, water retention, aeration, erosion control, and other soil properties.
SYNONYMS: decomposed material.
SOURCE: From AS 4454 (2001 draft) and Standards Australia AS 3831, (1998c).

Compost
A crumbly, earthy, sweet-smelling mixture of decomposing organic matter (e.g., leaves, food scraps) created in a controlled, thermophilic that is often used to improve the texture, water-retaining capacity, and aeration of soil.
SYNONYMS: decomposed material
SOURCE: US EPA

Compost pile
Refers to a pile of organic material subjected to aerobic decomposition. The pile must be aerated, through forced or passive aeration systems or via mechanical agitation.
SYNONYMS: Windrow; static pile.
SOURCE: Manser and Keeling, (1996).

Compost tea
Compost tea is a liquid extract of a composted material, which is pasteurised and has undergone composting for a minimum period of six weeks. Compost tea contains organic and inorganic soluble nutrients, and a large number of organisms including bacteria, fungi, protozoa and nematodes.
SYNONYMS: compost extracts, aqueous compost extracts.
SOURCE: Ingham, (1999).

Compostable organics
Compostable organics is a generic term for all organic materials that are appropriate for collection and use as feedstocks for composting or in related biological treatment systems (e.g. anaerobic digestion). Compostable organics is defined by its material components: residual food organics; garden organics; wood and timber; biosolids, and agricultural organics.
SYNONYMS: recyclable organics; recyclable organic material, green waste.
SOURCE: Recycled Organics Unit and CRC for Waste Management and Pollution Control, (1998).

Composted mulch
Any pasteurised product which has undergone composting for a period of not less than 6 weeks (excluding polymers which do not degrade such as plastics, rubber and coatings) that is suitable for placing on soil surfaces. Composted mulch has at least 70% by mass of its particles with a maximum size of greater than 15 mm.
See APPENDICES: A, B and H
SYNONYMS: coarse compost; coarse mulch.
SOURCE: Standards Australia AS 4454, (1999).

Composting
The process whereby organic materials are pasteurised and microbially transformed under aerobic and thermophilic conditions for a period not less than 6 weeks. By definition, it is a process that must be carried out under controlled conditions yielding mature products that do not contain any weed seeds or pathogens.
SYNONYMS: aerobic digestion; windrowing.
SOURCE: Recycled Organics Unit.

Composting
The controlled biological decomposition of organic material under aerobic or anaerobic. Organic materials are broken down (decomposed by microorganisms) into compost, also known as humus. Composting can occur in a backyard bin, a pile, long windrows, or in a vermicomposting container.
SYNONYMS: aerobic digestion; windrowing.
SOURCE: US EPA

Composting
Means the autothermic and thermophilic biological decomposition of separately collected biowaste in the presence of oxygen and under controlled conditions by the action of micro- and macro-organisms in order to produce compost.
SYNONYMS: aerobic digestion; windrowing.
SOURCE: Working document on Biological Treatment of Biowaste elaborated by working group of DG ENV.A.2 (European Commission).

Composting Amendment
An ingredient in a mixture of composting raw materials included to improve the overall characteristics of the mix. Amendments often add carbon, dryness, or porosity to the mix.
SYNONYMS: compost additive; recipe additive.
SOURCE: Rynk et al., (1992).

Contamination (composting)
Contaminants within this context include physical inorganic materials (metals, glass etc.), non-biodegradable organic materials (plastics), chemical compounds and/or biological agents that can have a detrimental impact on the quality of any recycled organic products manufactured from source separated compostable organic materials.
SYNONYMS:
SOURCE: Recycled Organics Unit.

C

D

Decompose
To break down into basic components, given the right conditions of light, air, and moisture; refers to materials such as food and other plant and animal matter.
SYNONYMS: biodegrade
SOURCE: US EPA

Decomposers
Refers to the microorganisms and invertebrates that help breakdown organic waste materials.
SYNONYMS: biodegradables
SOURCE: Recycled Organics Unit.

Decomposition
The breakdown of organic waste materials by micro-organisms.
SYNONYMS: rotting, digestion.
SOURCE: NSW Waste Boards, (1999).

Degradability
Term describing the ease and extent that a substance is decomposed by the composting process. Materials which break down quickly and/or completely during the time frame of composting are highly degradable. Materials which resist biological decomposition are poorly or even non-degradable.
SYNONYMS: rotting; digestion.
SOURCE: Rynk et al., (1992).

Denitrification
An anaerobic biological process which converts nitrogen compounds to nitrogen gas or nitrous oxide.
SYNONYMS: nitrogen loss.
SOURCE: Rynk et al., (1992).

Digestion
The process by which organic or volatile matter is gasified, liquefied, mineralised, and/or converted into more stable organic matter through the actions of living organisms.
SYNONYMS: decomposition.
SOURCE: NSW Waste Boards, (1999).

Disposal
means any operation which is not recovery even where the operation has as a secondary consequence the reclamation of substances or energy.
SYNONYMS: landfilling
SOURCE: Waste Framework Directive - EU

Domestic Waste
Component of the waste stream arising from households.
SYNONYMS: household waste; municipal waste.
SOURCE: Standards Australia AS 3831, (1998c).

Drop-Off Recycling
Places where materials or goods can be lawfully deposited for resource recovery or special management.
SYNONYMS: collection centres.
SOURCE: Standards Australia AS 3831, (1998c).

Dry Matter
The portion of a substance that is not comprised of water. The dry matter content (%) is equal to 100% minus the moisture content (%).
SYNONYMS: dry weight; dry material.
SOURCE: Rynk et al., (1992).

Dump picker
Woman, man, child or family who extracts recyclable materials from disposal sites.
SYNOMYMS: scavenger, waste picker
SOURCE: VNG International

E

Effluent
Wastewater from sewage collection or treatment plants, or wastewater from collection or treatment systems that are ancillary to processing industries involving livestock, agriculture, wood, paper or food, being wastewater that is conveyed from the place of generation by means of a pipe, canal or other conventional method used in irrigation (but not by means of a tanker or truck**).**
SYNONYMS: wastewater; treated wastewater.
SOURCE: NSW EPA, (1999).

Electrical Conductivity (EC)
A measure of a solution's ability to carry an electrical current; varies both with the number and type of ions contained in the solution. Usually measured in deci-Siemens per metre (dS m-1).
SYNONYMS: total dissolved salts (TDS); soluble salts; salinity.
SOURCE: Rynk et al., (1992).

Extended Pile
A pile form used in the aerated static pile composting technique in which a large pile is constructed of individual cells, each with an aeration system. Cells are added daily and stacked against the previous cell, giving the overall pile a nearly rectangular cross section.
SYNONYMS: aerated static pile.
SOURCE: Rynk et al., (1992).

F

Feedstock
Organic materials used for composting or related biological treatment systems. Different feedstocks have different nutrient concentrations, moisture, structure and contamination levels (physical, chemical and biological).
SYNONYMS: feed; substrate.
SOURCE: Recycled Organics Unit.

Fertiliser Value
An estimate of the value of commercial fertiliser elements (N, P, K etc.) that can be replaced by manure or a recycled organic product. Usually expressed as dollars per tonne of product or quantity of nutrients per tonne of product.
SYNONYMS: fertiliser equivalent.
SOURCE: Modified from Rynk et al., (1992).

Food chain
The transfer of food energy from one organism to the next. As one example of a simple food chain, an insect consumes a plant and is then consumed by a bird.
SYNONYMS: Food cycle
SOURCE: US EPA

Food Organics (Compostable Organics)
The food organics material description is defined by its component materials, which include:
• Fruit and vegetable material
• Meat and poultry
• Fats and oils
• Seafood (including shellfish, excluding oyster shells)
• Recalcitrants (large bones >15mm diameter, oyster shell, coconut shells etc.)
• Dairy (solid and liquid)
• Bread, pastries & flours (including rice & corn flours)
• Food soiled paper products (hand towels, butter wrap etc.)
• Biodegradeables (cutlery, bags, polymers)
Such materials may be derived from domestic or commercial and industrial sources. The definition does not include grease trap waste. Food organics is one of the primary components of the *compostable organics* stream.
SYNONYMS: food waste; kitchen organics; restaurant waste; food residuals.
SOURCE: Modified from NSW EPA, (1999).

Forced Aeration
Means of supplying air to a composting pile or vessel which relies on blowers to move air through the composting materials.
SYNONYMS: forced ventilation; positive aeration; positive ventilation.
SOURCE: Rynk et al., (1992).

Formal waste sector
Solid waste management activities planned, sponsored, financed, carried out or regulated and/ r recognized by the formal local authorities or their agents, usually through contracts, licenses or concessions.
SYNONYMS: solid waste system, solid waste authorities
SOURCE: VNG International

Fruit and Vegetable (Food Organics)
Refers to all residual fruit and vegetable materials including seeds and processing sludges that are appropriate for collection and use as feedstock materials for composting or in related biological treatment systems. Such material may be derived from domestic, agricultural or commercial & industrial sources. These materials form one of the material description subcategories within the Food Organics material description.
SYNONYMS: food organics, food waste; kitchen waste; compostable organics.
SOURCE: Recycled Organics Unit.

G

Garden Organics
The garden organics material definition is defined by its component materials including:
• Putrescible garden organics (grass clippings);
• non-woody garden organics;
• woody garden organics;
• trees and limbs;
• stumps and rootballs.
Such materials may be derived from domestic, commercial and industrial and commercial and demolition sources. Garden organics is one of the primary components of the compostable organics stream. Garden organics is the standard material description from the
SYNONYMS: garden waste; green waste; green organics; yard trimmings; yard waste.
SOURCE: Recycled Organics Unit.

General Purpose Soil
A material consisting of natural soil, amended natural soil, a blend of sand and organic materials or a blend of sand, natural soil materials and organic materials, which is suitable for the culture of plants usually grown in domestic gardens and landscaped areas. Note that general purpose soils include topsoils, natural soils, organic soils and soil blends.
SYNONYMS: topsoils; natural soils; organic soils; soil blends.
SOURCE: Australian Standard AS 4419, (1998).

Generator
The source of the waste, that is, the first point it becomes waste.
SYNONYMS: user, waste producer, holder
SOURCE: VNG International

Global Warming Potential (GWP)
Refers to the heat-trapping potential of greenhouse gases. Carbon dioxide is used as the reference gas for the measurement of GWP. A GWP of one kilogram of carbon dioxide is 1. The GWP of other greenhouse gases is identified in terms of equivalent carbon dioxide emissions. For example, 1 kg of methane has the GWP of 21 kg of carbon dioxide. See Greenhouse Gases.
SYNONYMS: heat-trapping potential
SOURCE: US EPA, (1998)

Grasscycling
Refers to a method of source reduction whereby grass clippings are left on the lawn rather than bagged and set out for collection.
SYNONYMS: mulch mowing
SOURCE: US EPA

Greenhouse effect
The excessive trapping of heat in the Earth's atmosphere by a blanket of gases. Gases such as water vapor, methane, and carbon dioxide exist naturally and help retain the Earth's normal surface temperature. Changes in the normal volume of gases in the atmosphere, due to human-induced activities, are believed to contribute to global climate change.
SYNONYMS:
SOURCE: US EPA

Greenhouse gas
Gas such as methane, nitrous oxide, ammonia, sulfur dioxide, carbon dioxide, and certain chlorinated hydrocarbons that affects the overall heat-retaining properties of the Earth's atmosphere. A build-up of these gases creates a warming of the Earth's atmosphere, thus changing the global climate.
SOURCE: US EPA

Greenhouse Gases (GHG)
Refers to gases that help warm the planet to a comfortable and livable temperature range. Examples of greenhouse gases include, carbon dioxide, methane and nitrous oxide. Excessive quantities of GHG in our atmosphere can increase global temperatures, resulting in rising sea levels, melting glaciers and erratic weather patterns.
SYNONYMS:
SOURCE: US EPA, (1998)

Grinding
Operation which reduces the particle size of materials. Grinding implies that particles are broken apart largely by smashing and crushing rather than tearing or slicing. See also shredding.
SYNONYMS: size reduction, shredding.
SOURCE: Rynk et al., (1992).

H

Holder
Means the producer of the waste or the natural or legal person who is in possession of it
SYNONYMS: generator
SOURCE: Landfill directive - EU

Home composting
The homeowner's practice of collecting leftover kitchen scraps (excluding meats and fats) and yard trimmings for decomposition in a private compost pile. Home composters can use their compost as a soil enhancement for their gardens.
SYNONYMS: backyard composting
SOURCE: US EPA

Home composting
Means the composting of the biowaste as well as the use of the compost in a garden belonging to a private household
SYNONYMS: backyard composting
SOURCE: Working document on Biological Treatment of biowaste - EU

Household waste
Means waste from households as well as other waste, which, because of its nature or composition, is similar to waste from households
SOURCE: OECD/ Eurostat

Household waste
Discarded materials from households which are generated in everyday life
SYNONYMS: domestic waste
SOURCE: VNG International

Humus
The dark or black carbon-rich relatively stable residue resulting from the decomposition of organic matter.
SYNONYMS :
SOURCE: Rynk et al., (1992).

Humus
The organic portion of soil; a substance resulting from the decay of plant and/or animal matter by microorganisms
SYNONYMS:
SOURCE: US EPA

I

Incineration
Controlled process by which solid, liquid or gaseous combustible wastes are burned and converted into energy, gases, and residues, including fly ash and bottom ash.
SYNONYMS: burning, combustion
SOURCE: VNG International

Induced aeration
Means of supplying air to a composting pile or vessel which relies on blowers to withdraw (or suck) air through the composting materials.
SYNONYMS: negative aeration, negative ventilation, suction.
SOURCE: Recycled Organics Unit.

Informal sector
Individuals or entreprises who are involved in waste activities but are not sponsored, financed, recognized or approved by the formal solid waste authorities, or who operate in violation of or in competition with formal authorities.
SYNONYMS: waste pickers, scavengers, informal private sector.
SOURCE: VNG International

Integrated waste management
The complementary use of a variety of waste management practices to safely and effectively handle municipal solid waste. These practices include source reduction, recycling, composting, combustion, waste-to-energy, and landfilling.
SYNONYMS:
SOURCE: US EPA

In-vessel (General)
A containerised unit in which vermiculture, compost or anaerobic digestion-based processes are performed. Containers vary in size, configuration, degree of automation and level of process control. In-vessel systems are often used for treatment of putrescible organics in populated areas as they have minimal or no significant impact on the environment (e.g. through the generation of odour, leachate or attraction of pests or vermin).
SYNONYMS: containerised systems.
SOURCE: Recycled Organics Unit.

In-vessel composting
System of composting involving the use of an enclosed chamber or vessel in which (in most cases) the composting process is controlled by aeration. Aeration assists in heat removal, temperature control and oxygenation of the mass. Aeration is provided to the chamber by a blower fan which can work in a positive (blowing) and/or negative (sucking) mode. Rate of aeration can be controlled with temperature, oxygen or carbon dioxide feedback signals.
SYNONYMS: containerised composting
SOURCE: Recycled Organics Unit.

In-vessel composting
Means the composting of biowaste in a closed reactor where the composting process is accelerated by an optimized air exchange, water content and temperature control.
SYNONYMS: containerised composting
SOURCE: Working document on Biological Treatment of biowaste - EU

Itinerant waste buyer
Woman, man, child, family or enterprise that purchases source-separated waste materials from households, shops or institutions, usually focusing on one specific material or type of material.
SYNONYMS: IWB
SOURCE: VNG International

J

K

Kerbside Collection
Roadside collection of solid domestic waste separated for the purposes of recycling.
SOURCE: Standards Australia AS 3831, (1998c).

Kerbside Recycling
A formalised kerbside collection system for recyclables from households, where the generator segregates wastes according to material type and places them in containers on the kerbside for separate collection. The system is usually administered by local government authorities.
SYNONYMS: kerbside collection; domestic recycling.
SOURCE: NSW Waste Boards, (1999).

L

Land Application
The spraying or spreading of solid, semi-solid or liquid organic products onto the land surface, or their injection below the land surface.
SYNONYMS: land spreading; land disposal.
SOURCE: NSW EPA, (1997b).

Land Rehabilitation
The process of restoring and stablising an area of land/soil to a standard suitable for a given landuse activity.
SYNONYMS: land remediation.
SOURCE: NSW Waste Boards, (1999).

Landfill
Means a waste disposal site for the deposit of the waste onto or into land (i.e. underground), including:

- internal waste disposal sites (i.e. landfill where a producer of waste is carrying out its own waste disposal at the place of production), and
- a permanent site (I.e. more than one year) which is used for temporary storage of waste but excluding:
    - facilities where waste is unloaded in order to permit its preparation for further transport for recovery, treatment or disposal elsewhere, and
    - storage of waste prior to recovery or treatment for a period less than three years as a general rule, or
    - storage of waste prior to disposal for a period less than one year;

SYNONYMS:
SOURCE: Landfill directive - EU

Landfill gas
Means all the gases generated from the landfilled waste
SYNONYMS :
SOURCE: Landfill directive - EU

Large-scale on-site system
A category of composting-based technology with the ability to process between 250 and 10 000 kg of compostable organics per day. Such systems are usually comprised of an in-vessel or outdoor type of composting system. Such systems may also consist of high capacity chippers or tub grinders, large industrial screens, windrow turners, front-end loaders and automated bagging equipment. Procedures involved in the management of the processing system are usually automated or carried out with industrial machinery.
SYNONYMS:
SOURCE: Recycled Organics Unit.

Leachate
Liquid released by, or water that has percolated through, waste or recovered materials, and that contains dissolved and/or suspended substances and/or solids and/or gases.
SYNONYMS:
SOURCE: NSW EPA, (1999).

Life cycle
The complete cycle of events occurring over the lifetime of an animate or inanimate object. For example, in the life cycle of a plant, seeds are dropped in the ground; soil, water, and compost help the plants grow; the plants drop seeds; the plants die and become compost; new seeds grow into new plants. A product life cycle is the series of steps involved in manufacturing; distributing; using; reusing, recycling, or ultimately disposing of a product.
SYNONYMS:
SOURCE: US EPA

Life Cycle Analysis (LCA)
Analysis of the environmental impacts incurred during the life cycle (the production, consumption and disposal) of a product.
SYNONYMS:
SOURCE: EcoRecycle Victoria, (1999).

Lignin
A substance that, together with cellulose, forms the woody cell walls of plants and the cementing material between them. Lignin is resistant to decomposition.
SYNONYMS:
SOURCE: Rynk et al., (1992).

Liquid waste
means any waste in liquid form including waste waters but excluding sludge
SYNONYMS:
SOURCE: Landfill directive - EU

M

Manure
Refers to all faecal and urinary excretion of livestock and poultry that are appropriate for collection and use as feedstock materials for composting or in related biological treatment systems. This material may also contain bedding, spilled feed, water or soil. See also agricultural organics. Such material may be derived from agricultural sources.
SYNONYMS: Agricultural organics; Feed lot waste; livestock waste.
SOURCE: Rynk et al., (1992).

Maturation
Final stage of composting where temperatures remain steady below 45ºC, and the compost becomes safe to use with plants due to the absence of toxins.
SYNONYMS: curing; stabilisation.
SOURCE: EcoRecycle Victoria,(1998).

Maturity (of compost)
Is related to the level of composting feedstock material receives. A mature product is stable and does not cause toxicity to plants.
SYNONYMS: stability
SOURCE: Recycled Organics Unit

Mechanical-biological treatment (MBT)
General term covering a wide variety of combinations of centralized mechancical speration systems linked to one or many biological treatment methods, which allow:

- the extraction of biodegradable waste in order to recycle or recover;
- the pre-treatment of biodegradable waste to be landfilled, reducing it mass and stabilizing it;
- diverting the biodegradable fraction from landfill

Metabolism
Chemical processes necessary for life.
SYNONYMS:
SOURCE: Haug, (1993).

Methane
A colorless, odorless, flammable gas formed by the anaerobic decomposition of organic waste in a landfill. Methane also is a greenhouse gas that contributes to global climate change.

Many sanitary landfills have a system in place for methane gas recovery. These facilities collect some of the methane and sell it as a source of energy for heating buildings, manufacturing products, or other uses.
SYNONYMS: CH4
SOURCE: US EPA

Methane
Methane is a greenhouse gas with a global warming potential (GWP) 21 times greater than carbon dioxide. See Global Warming Potential; Greenhouse Gases.
SYNONYMS: CH4
SOURCE: US EPA, (1998).

Mesophilic
A temperature range of 20-45ºC. Mesophilic microorganisms grow well at these temperatures and are also important for decomposition during the cool-down or maturation stage of composting. Most pathogenic microorganisms grow in this temperature range, and are thus destroyed under high temperature (thermophilic) conditions during composting.
SYNONYMS: low temperature.
SOURCE: Recycled Organics Unit.

Microorganisms
Organisms of microscopic size, such as bacteria, amoeba, and viruses.
SOURCE: US EPA

Mid-scale On-site System
A category of composting or vermiculture-based technology with the ability to process between 20 and 250 kg of compostable organics per day. Such systems are usually comprised of an in-vessel processing unit (composting or vermiculture based) and size reduction equipment (e.g. garden type petrol driven chippers or shredders). Procedures involved in the management of the processing system may involve a combination of manual labour and small mechanical equipment. Mid-scale systems are often used for the treatment of compostable organics produced by the commercial and industrial sector, hospitals and institutions etc.

SYNONYMS:
SOURCE: Recycled Organics Unit.

Moisture Content
The fraction or percentage of a substrate comprised of water. Moisture content equals the weight of the water portion divided by the total weight (water plus dry matter portion).
SYNONYMS: water content; gravimetric water content.
SOURCE: Rynk et al., (1992).

Mulch
Any pasteurised organic product (excluding polymers which do not degrade such as plastics, rubber and coatings) that is suitable for placing on soil surfaces. Mulch has at least 70% by mass of its particles with a maximum size of greater than 15 mm.
SYNONYMS:
SOURCE: Standards Australia AS 4454, (1999).

Multiple Unit Dwelling (MUD)
A form of domestic housing that includes flats, studios, apartments or units, usually located in urban regions.
SYNONYMS: multi-unit dwelling; flat; studio; apartment; unit.
SOURCE: Recycled Organics Unit.

Municipal
Properties, goods, and services owned or operated by a city or county government.
SYNONYMS: city
SOURCE: US EPA

Municipal solid waste
Waste such as durable goods, disposable goods, containers and packaging, food scraps, yard trimmings, and miscellaneous inorganic wastes from households, some commercial establishments (e.g., businesses or restaurants), institutions (e.g., schools or hospitals), and some industrial sources. It does not include nonhazardous industrial wastes, sewage, agricultural waste, hazardous waste, or construction and demolition waste.
SYNONYMS: garbage, trash, refuse, or debris.
SOURCE: US EPA

Municipal Solid Waste (MSW)
The solid component of the waste stream arising from all sources within a defined geographic area.
SYNONYMS: domestic waste.
SOURCE: Standards Australia AS 3831, (1998c).

Municipal waste
Means waste from households, as well as other waste which, because of its nature or composition, is similar to waste from household
SYNONYMS:
SOURCE: Landfill directive – EU

Municipality
A unit of local government with its own level of governance, responsibility and representation.
SYNONYMS: local government authority, city
SOURCE: VNG International

N

Natural Soil
A soil that has been dug from the landscape and is presented for use with no more than minor amendment. This soil could be topsoil, subsoil or a mixture of them. Typically it will have a bulk density of greater than 0.7 kg/L.
SYNONYMS: topsoil.
SOURCE: Australian Standard AS 4419, (1998).

Nitrate-nitrogen
A negatively charged ion comprised of nitrogen and oxygen (NO3). Nitrate is a water soluble and mobile form of nitrogen. Because of its negative charge, it is not strongly held by soil particles (also negative) and can be leached away.
SYNONYMS:
SOURCE: Rynk et al., (1992).

Nitrification
The biochemical oxidation of ammonia-nitrogen to nitrate.
SYNONYMS:
SOURCE: Rynk et al., (1992).

Nitrous Oxide
Nitrous oxide is a greenhouse gas with a global warming potential (GWP) 310 times greater than carbon dioxide. See Global Warming Potential; Greenhouse Gases.
SYNONYMS: N2O
SOURCE: US EPA, (1998)

N2O
Chemical symbol for nitrous oxide. Nitrous oxide is a greenhouse gas with a global warming potential (GWP) 310 times greater than carbon dioxide. See Global Warming Potential; Greenhouse Gases.
SYNONYMS: nitrous oxide
SOURCE: US EPA, (1998)

Non-renewable resources
A natural resource considered finite in supply because of its scarcity, rapid depletion or extreme length of time to reproduce.
SYNONYMS:
SOURCE: Standards Australia AS 3831, (1998c)

O

On-farm Composting
The aerobic conversion of organic materials by microorganisms with technologies based on-farm. By definition, it is a process that must be carried out under controlled conditions yielding cured products. On-farm composting systems are usually outdoors and are based on simple and inexpensive technologies, such as: turned piles, passively aerated or forcedly aerated static piles.
SYNONYMS: low technology composting; outdoor composting; field composting.
SOURCE: Recycled Organics Unit.

On-site
A reference to something being done in relation to waste on site is a reference to that thing being done only on the premises on which the waste was generated.
SYNONYMS:
SOURCE: NSW EPA, (1999).

On-site composting
Means the composting of the biowaste where it is generated
SYNONYMS: decentralized composting, proximity composting
SOURCE: Working document on Biological Treatment of biowaste - EU

On-site, Large-Scale System
A category of on-site composting based technology with the ability to process between 250 and 5000 kg of compostable organics per day. Such systems are usually comprised of an in-vessel or outdoor type of composting system. Such systems also consist of high capacity chippers or tub grinders, large industrial screens, windrow turners, front-end loaders and automated bagging equipment. Procedures involved in the management of the processing system are usually automated or carried out with industrial machinery.
SYNONYMS: industrial-scale.
SOURCE: Recycled Organics Unit.

Organic
From a living organism (e.g., plant, animal, person, or bacteria). Also refers to a product grown or manufactured only with natural materials
SYNONYMS: Bio
SOURCE: US EPA

Organic matter
Chemical substances of animal or vegetable origin, consisting of hydrocarbons and their derivates.
SYNONYMS:
SOURCE: Rynk et al., (1992).

Organic recycling
Shall mean the aerobic (composting) or anaerobic (biomethanisation) treatment, under controlled conditions and using micro-organisms, of the biodegradable parts of (packaging) waste, which produces stabilised organic residues or methane. Landfill shall not be considered a form of organic recycling.
SYNONYMS:
SOURCE: European Parliament and Council Directive 94/62/EC

Organic soil
A general-purpose soil (normally an amended natural soil or soil blend) that has a bulk density of greater than 0.6 kg L-1, and with an organic matter content in the range 15% to 25% by mass.
SYNONYMS:
SOURCE: Standards Australia AS 4419, (1998b).

Organic waste
Is the term used to describe those wastes that are readily biodegradable, or easily breakdown with the assistance of micro-organisms. Organic wastes consist of materials that contain molecules based on carbon.
SYNONYM: Biodegradable waste
SOURCE: EMRC, Australia

Organic waste
The decomposable fraction of domestic and commercial waste, including kitchen & garden waste sometimes including animal (by) products.
SYNONYMS: biowaste, putresicibles
SOURCE: VNG International

Organism
a living body made up of cells and tissue; examples include trees, animals, humans, and bacteri
SOURCE: US EPA

P

Passive Aeration
Air movement through composting windrows and piles which occurs by natural mechanisms including convection, diffusion, wind, and the tendency of warm air to rise (thermal buoyancy).
SYNONYMS: natural aeration.
SOURCE: Modified from Rynk et al., (1992).

Passively Aerated Windrow
A composting method in which windrows are constructed over a series of perforated plastic pipes, which serve as air ducts for passive aeration. Windrows are not turned.
SYNONYMS: passively aerated static pile.
SOURCE: Rynk et al., (1992).

Pathogens
Microorganisms capable of producing disease or infection in plants or animals. Pathogens can be killed by heat produced during thermophilic composting.
SYNONYMS: disease causing organisms.
SOURCE: Modified from EcoRecycle Victoria, (1998).

Peat
Unconsolidated soil material consisting of organic matter accumulated under conditions of excessive moisture. The organic matter
is not decomposed or is only slightly decomposed.
SYNONYMS:
SOURCE: Rynk et al., (1992).

pH
A measure of the concentration of hydrogen ions in a solution. pH is expressed as a negative exponent. Material that has a pH of 8 has ten times fewer hydrogen ions than a material with a pH of 7. The lower the pH, the more hydrogen ions are present, and the more acidic the material is. The higher the pH, the fewer hydrogen ions present, and the more basic it is. A pH of 7 is considered neutral.
SYNONYMS: acidity; alkalinity.
SOURCE: Modified from Rynk et al.(1992).

pH
a measure of acidity or alkalinity. The pH scale ranges from 0 to 14. A substance with a value less than 7 is acidic, 7 is neutral, and above 7 is alkaline.
SYNONYMS: acidity; alkalinity.
SOURCE: US EPA

Phytotoxic
Toxic to plants. Partially decomposed organic materials or immature composts are often phytotoxic, but this usually decreases with time. Such products may be phytotoxic due to a number of factors, including: low nutrient content; high oxygen consumption; presence of fatty acid or alcohol metabolites formed by microorganisms under anaerobic conditions; or due to excessive concentrations of salts, heavy metals and other organic compounds.
SYNONYMS: phytotoxicity.
SOURCE: Recycled Organics Unit

Preparing for re-use
Means checking, cleaning or repairing recovery operations, by which products or components of products that have become waste are prepared so that they can be re-used without any other pre-processing
SYNONYMS:
SOURCE: Waste Framework Directive - EU

Pre-processing
Preparing waste materials for subsequent processing without adding significant value to them
SYNONYMS:
SOURCE: sorting, screening, sieving, compaction, densification, size reduction, washing, drying

Prevention
Means measures taken before a substance, material or product has become waste, that reduce:

- the quantity of waste, including through the re-use of products or the extension of the life span of products;
- the adverse impacts of the generated waste on the environment and human health; or
- the content of harmful substances in materials and products

SYNONYMS: reduction, avoidance
SOURCE: Waste Framework Directive - EU

Process flow diagram
A visual schematic representation of the movement of materials through the entire waste system, which

does NOT indicate the weight of each fraction at each stage.
SYNONYMS: pdf, materials flow, chain analysis
SOURCE: VNG International

Processing
Subjecting a substance to a physical, chemical or biological treatment or a combination of treatments. Composting, for example, is a form of processing.
SYNONYMS: beneficiation, upgrading
SOURCE: NSW EPA, (1999).

Processing
Manual or mechanical operations to preserve or re-introduce value added into materials. Usually involves densification, size reduction, sorting, and then packaging or transport.
SYNONYMS: beneficiation, upgrading
SOURCE: VNG International

Processing Capacity
The maximum amount (mass or volume) of feedstock that can be added to a processing technology (e.g. composting technology) per unit time (e.g. per week) without causing system failure. System failure is evident when the processing technology produces problematic environmental emissions and/or declines in processing efficiency and/or produces product of unacceptable quality.
SYNONYMS: upgrading capacity
SOURCE: Recycled Organics Unit.

Provider
The entity providing the removal service, either public or private, formal or informal, micro-, small, medium, or large.
SYNONYMS: service organization, waste collection firm, public works department, hauler
SOURCE: VNG International

Q

Quality
Degree to which a set of inherent characteristics fulfills requirements.
SYNONYMS:
SOURCE: Standards Australia and Standards New Zealand AS/NZS ISO 9000, (2000).

Quality Assurance
Part of quality management focused on providing confidence that quality requirements will be fulfilled.
SYNONYMS:
SOURCE: Standards Australia and Standards New Zealand AS/NZS ISO 9000 (2000).

Quality Management System
Management system to direct and control an organisation with regard to quality.
SYNONYMS:
SOURCE: Standards Australia and Standards New Zealand AS/NZS ISO 9000, (2000).

R

Raw materials
Unprocessed materials used in the manufacture of products. These unprocessed materials can be either natural substances such as wood or metals or recovered materials such as crushed glass from residential recycling.
SYNONYMS: natural substances
SOURCE: US EPA

Recovery
Means any operation the principal result of which is waste serving a useful purpose by replacing other materials which would otherwise have been used to fulfill a particular function, or waste being prepared to fulfill that function, in the plant or in the wider economy.
SYNONYMS: resource recovery, energy recovery, reuse, materials recovery, recycling, or a combination of these
SOURCE: Waste Framework Directive - EU

Recovery
Process of extracting economically usable materials or energy from wastes. May involve recycling.
SYNONYMS: resource recovery, energy recovery, reuse, materials recovery, recycling, or a combination of these
SOURCE: VNG International

Recovery rate
The percentage relationship between the amount of recoverable materials that reach recycling, composting or energy recovery and the total amount generated.
SYNONYMS: capture rate
SOURCE: VNG International

Recycled Organics
Generic term for a range of products manufactured from compostable organic materials (garden organics, food organics, residual wood and timber, biosolids and agricultural organics)
SYNONYMS: composts, soil conditioners, mulches, artificial soils, raw products, potting mix, vermicast, vermicompost, sterilised products, pasteurised products, top dressings, stock feed.
SOURCE: Recycled Organics Unit.

Recycle/Recycling
Set of processes (including biological) for converting recovered materials that would otherwise be disposed of as wastes, into useful materials and or products. The following definitions apply:
a) *Closed loop recycling* – recycling process in which the reclaimed output is used as an input to the same product system.
b) *Open loop recycling* – recycling process in which the reclaimed output is used as an input to another product system.
SYNONYMS:
SOURCE: Standards Australia AS 3831, (1998c).

Recycling
Means any recovery operation by which waste materials are reprocessed into products, materials or substances whether for the original or other purposes. It includes the reprocessing of organic material but does not include energy recovery and the reprocessing into materials that are to be used as fuels or for backfilling operations;
SYNONYMS:
SOURCE: Waste Framework Directive - EU

Recycling
Collecting, sorting, processing, and converting materials that would have been thrown away into raw materials used to make the same or new products.
SYNONYMS:
SOURCE: US EPA

Recycling (or composting market)
A business, individual, organization or enterprise that is prepared to accept and pay for materials recovered from the waste stream on a regular or structural basis, even when there is no payment made.
SYNONYMS: end-user industry, buyer, dealer, broker
SOURCE: VNG International

Recycling loop
The cycle of collecting and processing, manufacturing products with recycled content, and purchasing products containing recycled materials. Consumers “close the recycling loop” when they buy recycled-content items.
SYNONYMS:

SOURCE: US EPA

Refuse Derived Fuel
Energy source obtained by shredding and partial drying of municipal solid waste.
SYNONYMS: RDF
SOURCE: Standards Australia AS 3831, (1998c).

Residual Solid Waste
That fraction of the waste stream remaining after the more easily recyclable materials have been removed such as food waste, garden waste and traditional dry recyclables. Typically material collected in domestic MSW garbage bins (refer to Municipal solid waste definition).
SYNONYMS: Residual waste, residual MSW
SOURCE: Recycled Organics Unit

Resource Recovery
Process that extracts material or energy from the waste stream.
SYNONYMS:
SOURCE: Standards Australia AS 3831, (1998c)

Resource recovery
The process of obtaining materials from waste that can be used as raw materials in the manufacture of new products or converting these materials into some form of fuel or energy source. An integrated resource recovery program may include recycling, waste-to-energy, composting, and/or other components.
SYNONYMS:
SOURCE: US EPA

Resources
Materials used to make products, generate heat, produce electricity, or perform work. See natural resources, nonrenewable resources, and renewable resources.
SYNONYMS:
SOURCE: US EPA

Renewable resource
Naturally occurring raw material that comes from a limitless or cyclical source such as the sun, wind, water (hydroelectricity), or trees. When properly used and managed, renewable resources are not consumed faster than they are replenished.
SYNONYMS:
SOURCE: US EPA

Reusable
Material that can be used again, either for its original purpose, or for a new purpose.
SYNONYMS:
SOURCE: US EPA

Reuse
means any operation by which products or components that are not waste are used again for the same purpose for which they were conceived
SYNONYMS:
SOURCE: Waste Framework Directive - EU

Reuse
Using a product again for the same or a different purpose without further manufacture, e.g. use of second-hand boxes for repacking goods or for storage of household goods.
SYNONYMS:
SOURCE: Standards Australia AS 3831, (1998c).

Reuse
a type of source reduction activity involving the recovery or reapplication of a package, used product, or material in a manner that retains its original form or identity.
SYNONYMS:
SOURCE: US EPA

R

S

Sanitary landfill
A site where waste is managed to prevent or minimize health, safety, and environmental impacts. To develop a sanitary landfill, communities excavate soil and install an impermeable liner, made of plastic or clay, to prevent the contamination of ground water. Waste is deposited in different cells and covered daily with soil. Sanitary landfills often have environmental monitoring systems to track performance and collect leachate and methane gas. Some landfills are specially designed to handle hazardous waste.
SYNONYMS:
SOURCE: US EPA

Separate collection
Means the collection where a waste stream is kept separately by type and nature so as to facilitate a specific treatment
SYNONYMS:
SOURCE: Waste Framework Directive - EU

Separation at source
Actions taken by a household to keep certain materials separate from others.
SYNONYMS: segregation at source
SOURCE: VNG International

Shredding
An operation which reduces the particle size of materials. Shredding implies that the particles are broken apart by tearing and slicing. See also grinding.
SYNONYMS: size reduction, grinding
SOURCE: Rynk et al., (1992).

Sludges
Semi-liquid waste produced as a byproduct of an industrial process.
SYNONYMS: biosolids
SOURCE: NSW Waste Boards, (1999).

Solid waste
Materials that are discarded or rejected when their owner considers them to be spent, useless, worthless or in excess of the requirements
SYNONYMS: garbage, trash, waste, rubbish
SOURCE: VNG International

Soil Conditioner
Any composted or pasteurised organic material that is suitable for adding to soils. This term also includes 'soil amendment', 'soil additive', 'soil improver' and similar terms, but excludes polymers which do not biodegrade, such as plastics, rubber and coatings. Soil conditioners may be either 'composted soil conditioners' or 'pasteurised soil conditioners'. Soil conditioner has not more than 15% by mass of particles with a maximum size above 15 mm.
SYNONYMS: soil amendment; soil additive; soil improver.
SOURCE: Standards Australia AS 4454, (1999).

Soil Structure
The combination or arrangement of primary soil particles into secondary particles, unit, or peds. Compost helps bind primary soil particles to improve the structure of soil.
SYNONYMS:
SOURCE: Rynk et al., (1992).

Soil Texture
A characterisation of soil type, based on the relative proportions of sand, silt, and clay in a particular soil.
SYNONYMS:
SOURCE: Rynk et al., (1992).

Sorting
Separating mixed materials into single-material components, mechanically or manually. In some cases classifying a mixed single material stream into specific grades or types of that material.
SYNONYMS: classification, highgrading, selection
SOURCE: VNG International

Source reduction (also known as **waste prevention**)
Any change in the design, manufacture, purchase, or use of materials or products (including packaging) to reduce their amount or toxicity before they become municipal solid waste. Source reduction also refers to the reuse of products or materials.
SOURCE: US EPA

Source Separation
Physical sorting of the waste stream into its components at the point of generation.
SYNONYMS: sorting.
SOURCE: Standards Australia AS 3831, (1998c).

Stability (of Compost)
The rate of change or decomposition of compost. Usually stability refers to the lack of change or resistance to change. A stable compost continues to decompose at a very slow rate and has a low oxygen demand. See also maturation.
SYNONYMS: fully mature; stabilised; cured compost.
SOURCE: Rynk et al., (1992).

Street picker
Woman, man, child or family who removes recyclable materials from dumpsters, streets and public places.
SYNONYMS: street scavenger, waste picker
SOURCE: VNG International

Sustainability
Social and environmental practices that protect and enhance the human and natural resources needed by future generations to enjoy a quality of life equal to or greater than our own.
SYNONYMS:
SOURCE: US EPA

Swine feed
Food wastes collected from the household and commercial sectors which are either sold or used to feed pigs.
SYNONYMS: pig slops, swill, organic waste
SOURCE: VNG International

S

T

Thermophilic
"Heat loving," or surviving well in high temperatures. In the composting process, heat-loving microorganisms break down food scraps and yard trimmings into a crumbly, soil-like substance.
SOURCE: US EPA

Thermophilic
Temperatures above 45ºC. Used to describe a stage of composting in which high temperatures are sustained resulting in high rates of decomposition and pasteurisation of the organic material. Heat tolerant microorganisms survive well in these conditions.
SYNONYMS: high temperature; hot compost.
SOURCE: EcoRecycle Victoria, (1998).

Tipping fee
Payment to discharge waste at a transfer station, composting facility, incinerator or landfill for the service of disposing of waste. Is usually assessed per tonne, per cubic metre, or per vehicle-load or 'trip'.
SYNONYMS: dump fee, tip fee
SOURCE: VNG International

Top Dressing
A soil which is suitable for surface application to lawn.
SYNONYMS: topsoil.
SOURCE: Australian Standard AS 4419, (1998).

Toxic
Containing compounds that pose a substantial threat to human health and/or the environment.
SYNONYMS:
SOURCE: US EPA

Transfer
The movement of wastes from their first point of dumping to final disposal; it usually includes some very basic processing: compaction, pre-sorting or size reduction.
SYNONYMS: transit, collection point, depot
SOURCE: VNG International

Transfer Station
Facility which receives materials from the waste stream for possible segregation, consolidation or compaction for bulk transport for resource recovery, treatment or disposal facilities.
SYNONYMS:
SOURCE: Australian Standard AS 3831, (1998c).

Treatment
Means the physical, thermal, chemical or biological processes, including sorting, that change the characteristics of the waste in order to reduce its volume or hazardous nature, facilitate its handling or enhance recovery
SYNONYMS:
SOURCE: Landfill Directive - EC

Treatment
Means recovery or disposal operations, including preparation prior to recovery or disposal;
SYNONYMS: processing
SOURCE: Waste Framework Directive - EU

Treatment
Manual or mechanical operations to make discarded or disposed materials or mixed waste less dangerous or to improve its physical characteristics so that it is easier to incinerate or landfill. In some locations also used to mean conserving value-added.
SYNONYMS: decontamination, processing, composting, beneficiation, sorting, baling
SOURCE: VNG International

Turned Pile
System of composting involving the periodic turning of piles of organic matter with mechanical equipment (e.g. front-end loaders or specialized windrow turners) between 1.5 and 3 m in height. Turning assists in: aeration and oxygen re-supply; eliminating odours; reducing consolidation, and moisture and nutrient re-distribution.
SYNONYMS: turned heaps.
SOURCE: Recycled Organics Unit.

Turning
A composting operation which mixes and agitates material in a windrow pile or vessel. Its main aeration effect is to increase the porosity of the windrow to enhance passive aeration. It can be accomplished with front-end loaders or specially designed turning machines.
SYNONYMS: mixing; agitating.
SOURCE: Rynk et al., (1992).

U

Unit-based pricing/PAYT (Pay-As-You-Throw)
a system in which residents pay for municipal solid waste management services per unit of waste (by weight or volume) collected rather than through a fixed fee. Residents, for example, might purchase a sticker to place on each bag of waste set out at the curb—the price of the sticker covers the solid waste management service costs for the volume of the bag.
SYNONYMS:
SOURCE: US EPA

User
The entity that benefits from the service of removal or cleaning. Usually a household but can also be a business.
SYNONYMS: client, household, business, waste generator, waste disposer
SOURCE: VNG International

V

Valorization
The entire process of extracting, storing, collecting, or processing materials from the waste stream in order to extract the economic value added.
SYNONYMS: recycling, recovery, conserving value added
SOURCE: VNG International

Vermicomposting/vermiculture
A method of composting using a special kind of earthworm known as a red wiggler (Elsenia fetida), which eats its weight in organic matter each day. Over time, the organic material is replaced with worm castings, a rich brown matter that is an excellent natural plant food.
SYNONYMS: worm composting
SOURCE: US EPA

Vermiculture
System of stabilising organic materials under controlled conditions by specific worm species and microorganisms under mesophilic temperatures. Commercial vermiculture systems include: windrows or beds; stackable trays; batch-flow containers, and continuous flow containers.
SYNONYMS: vermicomposting; vermistabilisation; vermitreatment.
SOURCE: Recycled Organics Unit.

W

Waste
Means any substance or object which the holder discards or intends or is required to discard
SYNONYMS:
SOURCE: Waste Framework Directive - EU

Waste audit
Determination of the quantities and qualities of individual components present in a waste stream.
SYNONYMS: waste stream analysis; waste analysis; waste assessment.
SOURCE: Standards Australia AS 3831, (1998a).

Waste dealer
Individual or business purchasing materials for recycling or composting, storing them, upgrading or processing them, and then reselling them, or someone who trades in recyclables and uses a dedicated storage place.
SYNONYMS: junk shop owner, scrap trader, consolidator, waste buyer
SOURCE: VNG International

Waste holder
Means the waste producer or the natural or legal person who is in possession of the waste.
SYNONYMS:
SOURCE: Waste Framework Directive - EU

Waste management
Means the collection, transport, recovery and disposal of waste, including the supervision of such operations and the after-care of disposal sites, and including actions taken as a dealer or broker.
SYNONYMS :
SOURCE: Waste Framework Directive - EU

Waste management
Administration of activities that provide for the collection, source separation, storage, transportation, transfer, processing, treatment, and disposal of waste.
SYNONYMS:
SOURCE: US EPA

Waste management hierarchy
the preferred way to manage solid waste is to first practice source reduction, then recycle and compost, and finally to combust waste at a waste-to-energy facility or place it in a sanitary landfill.
SYNONYMS:
SOURCE: US EPA

Waste minimisation
Application of activities such as waste avoidance, reduction, re-use and recycling and behaviour modification to minimise the amount of waste that requires disposal.
SYNONYMS: waste reduction.
SOURCE: Standards Australia AS 3831, (1998c).

Waste minimization
Includes reducing waste before it is even generated (see source reduction) and environmentally sound recycling. Often used in relation to hazardous waste.
SYNONYMS:
SOURCE: US EPA

Waste picker
Person who salvages recyclable materials from streets, public places or disposal sites.
SYNONYMS: scavenger, rag picker
SOURCE: VNG International

Waste producer
means anyone whose activities produce waste (original waste producer) or anyone who carries out pre-processing, mixing or other operations resulting in a change in the nature or composition of this waste
SOURCE: Waste Framework Directive - EU

Waste reduction
Limitation of waste through product design, material selection, policy and management.
SYNONYMS: waste minimisation; waste avoidance.
SOURCE: Standards Australia AS 3831, (1998c).

Waste stream
Flow of materials from a point of generation to ultimate disposal. NOTE: Components may be diverted from this stream for resource recovery.
SYNONYMS: waste flow.
SOURCE: Standards Australia AS 3831, (1998c).

Waste stream
The total flow of solid waste generated from homes, businesses, and institutions that must be recycled, incinerated, or disposed of in landfills.
SYNONYMS:
SOURCE: US EPA

Waste-to-energy
Waste to energy technologies can convert compostable organics into heat and electricity using a number of processes including:
• Combustion: the burning of biomass, such as the use of bagasse by the sugar industry in NSW to produce heat and electricity using steam turbine generators.
• Gasification: the efficient conversion of solid fuel to gaseous fuel such as was used to produce "town gas" from coal, before the advent of natural gas. The gas made can produce heat and electricity using gas engine generators.
• Pyrolysis: the production of a carbon rich solid fuel and a hydrocarbon rich gas by heating a biomass feedstock in the absence of oxygen, such as used to produce charcoal from wood.
SYNONYMS: combustion; gasification; pyrolysis.
SOURCE: SEDA, (2001).

Waste-to-energy
a process in which waste is brought to a facility and burned to generate steam or electricity.
SYNONYMS: combustion; gasification; pyrolysis
SOURCE: US EPA

Waste-to-energy facilities
Specially designed waste management facilities where waste is burned to create energy, which is captured for use in generating electricity.
SYNONYMS:
SOURCE: US EPA

Wet waste
Used both for the physically wet part of the waste stream and to describe compostable waste separated at source from dry or recyclable waste.
SYNONYMS: organic waste, green waste, organics
SOURCE: VNG International

Willingness to pay
The level and rate at which users (or their proxies) are willing to pay providers (or their agents).
SYNONYMS: price elasticity for solid waste service
SOURCE: VNG International

Windrow
Large, elongated pile of yard trimmings or other organic materials used in the composting process, typically turned by a machine. Municipal composting programs often use windrows for large-scale composting of yard trimmings.
SYNONYMS:
SOURCE: US EPA

Windrow composting
Means the composting of biowaste placed in elongated heaps which are periodically turned by mechanical means in order to increase the porosity of the heap and increase the homogeneity of the waste
SYNONYMS:
SOURCE: Working document on Biological Treatment of biowaste - EU

Windrow with or Without Aeration
System of composting involving the aeration of horizontally extended piles formed by a front-end loader or windrow turner. Extended piles are generally 1.5 to 3 m in height, and length is limited by the size of the composting pad. Aeration can be achieved by mechanical turning and/or the delivery of air from the base of the windrow (see aerated static pile).
SYNONYMS: turned windrow.
SOURCE: Recycled Organics Unit.

W

Woody Garden Organics (Garden Organics)
Refers to all compostable organic plant materials that have a diameter of between 5 and 150 mm that are appropriate for collection and use as feedstock materials for composting or in related biological treatment systems. Such material may be derived from domestic, agricultural, forestry, construction and demolition or commercial and industrial sources. These materials contain a significant wood or cellulose component, requiring different size reduction technology from non-woody garden organics. Examples include: branches; twigs and bark. Woody Garden Organics forms one of the material description subcategories within the Garden Organics material description.
SYNONYMS: garden organics; green waste; green organics; yard waste; compostable organics.
SOURCE: Recycled Organics Unit.

Y

Yard trimmings
Grass, leaves, tree branches, brush, tree stumps, and other compostable organic materials that are generated by homes, schools, or businesses.
SYNONYMS: garden organics
SOURCE: US EPA