



## Glossary of Solid Waste Terms

The following is a list of common terms, definitions and acronyms used in the solid waste field. The list includes definitions used in the City Code, Chapter 26, Solid Waste Regulations, and state and Federal EPA definitions where such definitions exist.

**Appliances** - Household-sized white goods such as refrigerators, stoves, dehumidifiers, air conditioners and washing machines. Federal regulations require that all Freon-containing appliances have proof of Freon gas recovery before disposal. Make arrangements with private haulers or take to the DOS or Drop-Off Station for disposal. Proper Freon removal and certification will be provided by the City or its contracted agent.

**Biodegradable** (or biologically degradable) - Organic waste materials that are capable of being degraded biologically by microorganisms and bacteria. Paper, wood, food and plants are biodegradable; metals, glass and most plastics are not.

**Biosolids** - Municipal sewage sludge resulting from the wastewater treatment process.

**Building Material** - Means wood with nails, other wood scrap, pane glass or debris, dry-wall, pieces or debris, plaster, carpeting, eaves troughs and shingles, structural demolition material and other items as defined by the Solid Waste Regulations. Materials may be placed into refuse carts as long as the lid can be closed, and the total weight of the cart does not exceed the limits on the carts. Materials may also be handled by private haulers or taken to the DOS or Drop-Off Station.

**Bulky Items** - appliances, furniture, mattresses, building materials, and other large household items and containers or items which exceed the capacity or weight limits for curbside pickup as defined by the Solid Waste Regulations. May not be left at the curb. Make arrangements with private haulers or take to the DOS or Drop-Off Station.

**Bundled Material** - May be up to 3-4 feet in length, and up to 18 inches in diameter, tied with biodegradable twine for compostable brush material.

**C&D (Construction and Demolition) Debris** - Solid waste from the construction or demolition of buildings, roads, and other structures including concrete, brick, asphalt, wood, masonry, composition roofing, roofing paper, shakes, shingles, linoleum, glass, dirt, gravel, steel, aluminum, copper, galvanized or plastic piping, or plaster.

**Commercial Waste** - The solid waste from all activities and land use other than residential occupancy, including solid waste from wholesale, retail, institutional, non profit organizations, schools, government agencies or service establishments, such as office buildings, stores, markets, theaters, hotels and warehouses.

**Commercial (Non-Residential) Solid Waste Services** - Businesses, schools, and government agencies within Ann Arbor may choose to contract with the City for dumpster refuse collection at \$33 per month for weekly servicing of a standard 6-yard dumpster, with the business providing and maintaining their own dumpster. Nonprofit organizations (including churches) are exempt from this fee.

Residential apartment locations and nonprofits are eligible for weekly refuse dumpster pickups from the city at no charge.

Supplemental for-fee trash dumpster service is available from the city as well to handle occasional or ongoing dumpster pickups at \$30 per collection, prepaid.

The City provides FREE Commercial Recycling collection to businesses and other non-residential locations, such as schools and nonprofits.



*Toxic recyclables* - Batteries, oil filters, and motor oil. These materials are typically not picked up from multi-family or commercial sites because of the public health and environmental safety issues with leaving toxic materials unattended next to a dumpster for up to a week at a time. Toxic recyclables are also accepted at the Drop-Off Station.

**Commingled Collection** - To collect more than one waste material in a single compartment container, such as collecting yard waste and vegetative food waste in a single collection vehicle, or collecting mixed paper and containers together.

**Compost** - The stabilized and sanitized product of composting which is beneficial to plant growth.

**Compostables** – Solid wastes that are separated for composting that are identified as organic material and able to be composted. Compostable materials that are suitable for collection by the City means leaves, brush, tree limbs up to 6 inches in diameter and 4 feet in length, vegetative prunings, Christmas trees, and other garden or yard waste and other organic material as may be specified in solid Waste Regulations. Compostables suitable for home composting are specified in the solid waste regulations and City-provided fact sheets.

**Composting** - Refers to the process of decomposition or decay of organic wastes, such as leaves, food, paper and sometimes mixed municipal solid waste. Composting usually takes place under aerobic conditions in an open pile or windrow or in a tank or container (in-vessel composting). This controlled aerobic decomposition of organic material yields a product suitable for use as a soil conditioner. The end product of composting is a humus-like material that can be added to soils to increase soil fertility, aeration and nutrient retention.

**Containers** - The City provides refuse carts and recycling bins. Containers are to be maintained for safe collector access, such as not having jagged edges or greasy sides. Each recycling tote or bundled brush may weigh up to 50 pounds. Compostable trash cans are 33 gallons maximum size, with handles and lids.

**Cost Effective** - A good value for the money spent.

**Curbcart** - A lightweight plastic container that the City requires to be used and has provided for a fee. A curbside cart ranges in size from 30 to 105 gallons, is equipped with wheels to allow it to be easily rolled to the curb, is used for collection of refuse or recyclables or other designated solid waste, and is able to be mechanically lifted into the collection hopper of a refuse or recycling truck.

**DDA** - The **Downtown Development Authority** as defined in Chapter 7 of the City Code.

**DOS (Drop-Off Station)** - The Drop-Off Station accepts the refuse, recyclables, and yard waste, plus numerous additional items, and sells selected reclaimed materials. It is open to the general public. The Station is operated on behalf of Washtenaw County and the City of Ann Arbor by Recycle Ann Arbor.

**Dumpster** - means a metal or plastic container in sizes that range from 1 cubic yard to 12 cubic yards, equipped with fixtures that allow the container to be dumped by a rear-loading or front-loading refuse or recycling truck. Large (generally with a 6 yard capacity), mechanically-unloaded receptacle for storing solid waste. These containers are typically used at large multi-family and commercial locations.

**Enterprise Fund** - A self-supporting method of funding solid waste operations through revenues generated from charges and fees for various services. A program accounting and budget management approach in which the fund balance each year is retained for the next year's operation, allowing the program more flexibility to handle variations in revenue and expenditures and address fluctuations in demand for services.

**Food Waste** - Residual food from residences, institutions, or commercial facilities, or unusable portions of fruit, animal, or vegetable material, including compostable paper resulting from food production.



**Garbage** - Solid waste that remains after recyclables and compostables have been removed, including all putrescible food wastes such as animal, fish, fowl, fruit or vegetable matter incident to the use, preparation and storage of food for human consumption and paper waste which has come into direct contact with food. It also includes paper or containers containing these wastes except as excluded by Solid Waste Regulations. It does not include prohibited materials specified in Section 2:5 or in the Solid Waste Regulations.

**General Fund** - The municipal budget funded by tax based revenue not encumbered for other specified purposes.

**Groundwater** - Water that occupies the free space in soil, sand, gravel or rock.

**Hazardous material** - Hazardous waste, medical waste, radioactive material, explosives and other material listed in Michigan Public Act 451 or in the Solid Waste Regulations.

**Hazardous waste** - solvents, pesticides, flammables, oil paints, and other substances listed in Michigan Public Act 451, Michigan Public Act 641, or Public Act 64 or in the Solid Waste Regulations.

**HDPE** - High-Density Polyethylene, a plastic used to make a variety of products including plastic milk jugs and landfill liners. Some HDPE containers can be identified by the number 2 stamp inside the recycling arrows on the container.

**Household Hazardous Waste (HHW)** - Hazardous waste generated by households including pesticides, herbicides, solvents, batteries, fuels, cleaners and non-latex paints. Disposal and recommendations are coordinated by the Washtenaw County Home Toxics Collection Center.

**Household Waste** - the solid waste discarded at residential dwellings, including single- and multi-family units.

**Landfill** - A disposal method, following state and federal environmental protection regulations, in which solid waste is deposited in engineered cells lined with synthetic membranes, clay and other materials, and then encapsulated when the cell is full by covering with additional layers of synthetic and natural materials as well as systems for extracting leachate and methane gas that are released by the waste over time.

**Market-based Contracting** - Establishing the performance specifications for a program's operation in the form of a request for bids or request for proposals and then procuring the services through a solicitation where sufficient numbers of companies will respond to provide market competition on price and service quality.

**Methane Gas Management** - A system of wells, pipelines, and mechanical devices designed to collect, clean, discharge and or combust methane gas released by solid waste contained in a landfill.

**Millage** - A tax-based source of funding for municipal programs that is calculated based on the assessed value of property.

**Mixed Paper** - includes newspaper magazines, office paper, "junk" mail, phone books, paperback books, catalogs, flattened and bagged boxboard.

**Mixed Containers** - includes empty, rinsed; milk cartons, juice boxes, glass (jars, bottles, Pyrex, dishes), ceramics, plastic bottles #1 and #2, metals (steel cans, lids, empty aerosols, aluminum cans, foil, pie tins)

**MRF - Materials Recovery Facility** (pronounced murf) - a facility where recyclable materials are sorted and processed for sale to various markets.



**MSW (Municipal Solid Waste) Landfill** - Is defined as a sanitary landfill that receives household waste. A municipal solid waste landfill may also receive other types of non-hazardous wastes, such as commercial solid waste and non-hazardous industrial wastes. Municipal solid waste landfills in the U.S. are required to meet the criteria established under Subtitle D of RCRA. These criteria ensure that such landfills are designed and operated to protect human health and the environment and establish requirements in seven areas: location, operation, design, ground water monitoring, corrective action, closure and post-closure, and financial assurance.

**Multi-Family Collection** - More than half of Ann Arbor's residents live in multi-family locations--apartments, condominiums, cooperatives and townhouses. These residents most typically use shared dumpsters for refuse. Recyclables are typically collected in large recycling carts parked next to the dumpsters.

The City provides free weekly residential refuse and recycling collection to residential locations.

Multifamily residents and residential management companies must make their own arrangements for handling bulky waste items, such as furniture, appliances, etc. The requirements for special waste preparation and prohibited materials apply to dumpster containment of refuse.

**NAP (Natural Area Preservation)** - Use of various land management techniques to preserve open land in an undeveloped state to allow full operation of natural ecological systems for recharging groundwater, providing habitat for wildlife, and supporting plant growth.

**OCC** – Old Corrugated Cardboard - Consists of corrugated containers having liners of either test liner, jute or kraft

**ONP** – Old News Paper - Consists of fresh newspapers as typically generated from news drives or curbside collections, not sunburned, containing not more than the normal colored sections. May contain magazines, catalogues and junk mail.

**Organic Waste or Organics** - Waste material containing carbon-to-carbon bonds and being biodegradable. The organic fraction of mixed municipal solid waste includes paper, wood, food wastes, and yard wastes.

**Organizations** (partial list)

- ALMR: The Association of Lighting and Mercury Recyclers
- APWA: The American Public Works Association
- ASTSWMO: The Association of State and Territorial Solid Waste Management Officials
- A&WM: The Air and Waste Management Association
- Canadian Compost Association
- CARI-ACIR: Canadian Association of Recycling Industries
- CMRA: The Construction Materials Recycling Association
- EIA: The Environmental Industries Association
- Environment Canada
- EPA: The U.S. Environmental Protection Agency
- GRRN: The Grassroots Recycling Network
- ISRI: The Institute of Scrap Recycling Industries
- ISWA: The International Solid Waste Association
- IWSA: The Integrated Waste Services Association
- OSHA: The Occupational Safety and Health Administration
- MWMA: The Municipal Waste Management Association
- NEMA: The National Electrical Manufacturers Association
- NRC: The National Recycling Coalition
- NSWMA: the National Solid Waste Management Association
- STMC: The Scrap Tire Management Council
- SWANA: The Solid Waste Association of North America
- USCC: The US Composting Council



- WASTE: The Waste Equipment Technology Association

**Pay-As-You-Throw (PAYT)** - A variable rate fee system for solid waste services in which each additional unit of waste (bag, can, etc.) requires payment of additional fees. Pay-As-You-Throw refers to charge and fee systems where waste generators are charged for solid waste collection based on the volume or weight of the solid waste collected. The purpose is to provide an economic incentive to reduce waste generation or to separate and recycle waste materials.

**PET** - Polyethylene Terephthalate - A plastic commonly used to make plastic soft drink bottles and other containers and products. Some PET containers can be identified by the numeral 1 stamped inside the recycling arrows on the container.

**Performance-based Contracting and Performance-based Partnerships** - Establishing the performance specifications for a program's operation (either through internal operations or contracting) through negotiation on specific program metrics, comparative benchmarking and cost plus budgeting.

**Post-consumer Food or Vegetative Waste** - Food or vegetative materials or products that have served their intended use and have been discarded for disposal after passing through the hands of a final user.

**Pre-consumer Food or Vegetative Waste** - Food or vegetative materials or products that are being discarded for disposal but have not been consumed, such as food items thrown away by grocery stores.

**Prepay Systems** - The fee collection system for prepaying for various refuse collection and recycling services ahead of the time of actual service delivery.

**Processing** - An operation to convert a solid waste into a useful product or to prepare it for disposal.

**Prohibited materials** - All items which may damage equipment or pose a safety threat to collectors or the environment, including cement, tar, mortar, rocks, bricks, railroad ties, tree stumps, logs, vehicle parts and tires, fuel tanks, wooden pallets, garage doors, pianos, hazardous waste, liquids, asbestos, and improperly prepared medical waste, paint, or animal waste. Grass clippings are to be grasscycled at home. These materials will not be collected with City solid waste pickups. A few of these materials, such as tires and treated wood, are accepted at the Drop-Off Station.

**Publications** (partial list)

- American Waste Digest: Solid waste products and information
- Biocycle: Journal of composting and organic recycling
- E News: SWANA's Monthly Electronic Newsletter
- Hauler Magazine: Solid waste equipment catalog
- MSW Management: SWANA's Monthly Membership Newsletter
- Public Works Journal: Information on solid waste and public works issues
- Recycling Product News: Recycling equipment
- Resource Recycling: Recycling and composting journal
- Solid Waste and Recycling: Canadian solid waste issues
- Solid Waste Digest: Regional and state-wide volume and pricing information
- Waste Age: Business magazine for the waste industry
- Waste Management World: ISWA's Official Magazine, international coverage
- Waste News: Information for businesses that generate and manage wastes

**PUD** - Planned Unit Development – Zoning District term, provides flexibility in regulation of land development and a compatible mixing of land use.



**RCRA** – (Pronounced WRECK-RAA), refers to the Resource Conservation and Recovery Act, the major U.S. Federal Legislation first passed in 1976, and amended several times, that governs the management of solid and hazardous waste in the U.S.

**Recyclables or Recyclable Materials** - Solid wastes that are separated for recycling or reuse, such as papers, metals, and glass, that are identified as recyclable material pursuant to a local comprehensive solid waste plan. All containers, paper, cardboard, and other materials specifically designated as recyclable by the City (see [Recycling Guide](#)) Solid Waste Regulations.

**Recycled Material** - A material separated from solid waste that has been processed and recovered as a usable product or material.

**Recycling** - Recycling involves the separation and collection of wastes, their subsequent transformation or remanufacture into usable products or materials, and the use of products made from recycled materials. Transforming or remanufacturing waste materials into usable or marketable materials for use other than landfill or incineration.

**Resource Recovery** - A general term used to describe the recovery of materials or energy from solid waste. Resource recovery encompasses recycling, reuse, composting and energy recovery.

**Refuse** - Solid waste from residential or commercial sources including miscellaneous nonputrescible waste material resulting from housekeeping and ordinary mercantile enterprises, including paper, cardboard, metal containers, crockery, plastic, rubber, building materials and bulk items, all rubbish and garbage which is not deemed recyclable or compostable as defined in the City Code of Ann Arbor, Chapter 26 or by the Solid Waste Regulations. It does not include hazardous material or other prohibited materials.

**Regional Partnership** - An intergovernmental agreement, in which two or more public agencies (counties, local units of government, other institutions) collaborate to provide services.

**Resident** - for the purposes of the City's solid waste services, this is a current occupant of an Ann Arbor home, including individual units of an apartment, condominium, townhouse or cooperative. The term does not include commercial establishments (non-residential locations) or property managers. Non residents include businesses, contractors, apartment managers and individuals living outside the City of Ann Arbor tax base.

**Reuse** - the use of a product more than once in its same form for the same or different purpose. Examples include refilling beverage bottles that have been returned a bottling company or using scrap tires as dock bumpers.

**Rubbish** - miscellaneous non-putrescible waste material resulting from housekeeping and ordinary mercantile enterprises, including paper, cardboard, metal containers, crockery, plastic, rubber, building materials, and bulk items. It does not include hazardous waste or other prohibited materials.

**Self-haul** - Materials hauled to transfer or disposal site by a generator rather than by contracted hauler.

**Sludge** - A semisolid substance consisting of settled solids combined with varying amounts of water and dissolved materials generated from a wastewater treatment plant or other source.

**Static Compost Pile** - A compost pile that is not turned or agitated during the composting process.

**Solid waste** - all material discarded by residents and commercial establishments and which qualifies for removal by the City of Ann Arbor. Solid waste includes commercial refuse, rubbish, garbage, compostables discarded by residents and commercial establishments and which qualifies for removal by the City of Ann Arbor. and recyclables. It does not include hazardous material or other prohibited materials. Is defined in RCRA to include any garbage,



refuse, sludge, and other discarded material, including solid, liquid, semisolid, or contained gaseous material resulting from industrial, commercial, mining, and agricultural operations and from community activities. RCRA also excludes certain materials from the definition of solid waste.

**Solid waste containers** - any containers approved by the Solid Waste Regulations for deposit of solid waste, including containers for refuse, recyclables or compostables. The City provides refuse carts for automated truck collection, and recycling bins--totes or carts. Free recycling bins are available by phoning 99-GREEN. Maximum size of acceptable compostable cans or bags is 30-35 gallons. Cans must have handles and a lid and be in good working condition. Bundled brush must be cut to 3-4 foot lengths and tied into bundles up to 18 inches in diameter. Each can, bag or bundle has a maximum weight of 50 pounds.

**Solid Waste Disposal** - Is defined in RCRA as the discharge, deposit, injection, dumping, spilling leaking or placing of solid waste on or in the land or water.

**Solid Waste Management** - Is a term used to describe the planned and organized management of solid waste in an environmentally and economically sound manner. Solid waste management encompasses management of the generation, storage, collection, transfer, transportation, processing, reuse, recycling, incineration, energy recovery and landfilling of solid waste. It includes all administrative, financial, educational, environmental, legal, planning, marketing and operational aspects of the management of solid wastes.

Solid Waste Primary Contact Phone – 734 994-2807. A 24-Hour information hotline is also available at 99-GREEN

**SOP – Sorted Office Paper** - Consists of paper, as typically generated by offices, containing primarily white and colored groundwood-free paper, free of unbleached fiber. May include a small percentage of groundwood computer printout and facsimile paper.

**Source Reduction** - Actions taken to reduce the quantity or toxicity of wastes that are produced. Source reduction is accomplished by redesigning products so that less waste or less toxic waste is produced when the product is discarded or by reducing consumption of certain products that become wastes. Also called Waste Reduction.

**Source Separation** - Sorting and separating various waste materials from each other by the waste generator so these materials can be separately collected for recycling or composting. Examples include separating newspapers, glass bottles, metal cans, plastic containers, corrugated cardboard, office papers and lawn and garden waste

**Stuff and Trash** - non-technical words used for "solid waste."

**Surplus Refuse** - Any containers approved by the solid waste regulations for deposit of solid waste, including containers for refuse, recyclables or compostables.

**SWL – Sorted White Ledger** - Consists of uncoated, printed or unprinted sheets, shavings, guillotined books, and cuttings of white groundwood-free ledger, bond, writing, and other paper which has similar fiber and filler content.

**Televisions & computer monitors** - prohibited from municipal refuse/landfill collection. These items may be taken to the Drop-Off Station for recycling; or disposed through reuse operations and computer manufacturer recycling programs.

**Tipping Fee** - The fee charged for accepting solid waste at a solid waste facility (e.g. transfer station, incinerator, MRF or landfill.)

**Transfer Station (TS)** - A building where the transfer of solid waste from either self-hauled vehicles or commercial vehicles to transfer trailers occurs. This facility receives and consolidates solid waste from collection trucks and other vehicles and loads the wastes onto tractor trailers, railcars or barges for long-haul transport to a distant facility.



**Transfer Trailers** - Detachable containers used to haul solid waste from transfer stations to disposal facilities. Transfer trailers can be transported either by semi-tractor or railroad car.

**Vegetative Food Waste** - Plant-based food waste excluding such items as meats, fish, and eggs.

**Washtenaw County Home Toxics Reduction Program** - The Home Toxics Reduction Program provides the residents of Washtenaw County with a disposal option for flammable, poisonous, toxic and corrosive materials. The program seeks to address the environmental and public health effects resulting from improper handling and disposal of home toxics, and is committed to reducing the use of home toxics and keeping citizens informed about the choices and responsibilities associated with purchasing, handling and disposing of toxic substances.

**Waste Sources and Types** (partial list):

- Agricultural Wastes: Crop residues and animal manures resulting from agricultural operations.
- Bulky Wastes: Large discarded material such as appliances, furniture, automobile parts, large branches and tree stumps.
- C&D Debris: Solid wastes resulting from construction and demolition (C&D) waste materials of buildings and other structures. C&D debris generally includes materials such as metals, wood, gypsum, asphalt shingles, roofing, concrete, rocks, rubble, soil, paper, plastics and glass.
- Combustible Waste: Solid wastes that will burn such as waste paper, cardboard, wood, plastics, textiles and leaves.
- E-Waste: Electronic waste refers to discarded electronic equipment including computers, monitors, printers, TVs, stereo systems and VCRs.
- Food Waste: Animal and vegetable materials resulting from the handling and preparation of foods.
- Garbage: A generic and somewhat antiquated term for solid waste.
- Green Waste: Grass clippings, shrub and tree cuttings and other solid wastes resulting from lawn care and gardening.
- Hazardous Waste: Hazardous wastes are solid wastes with properties that make them dangerous or capable of having a harmful effect on human health and the environment. Under RCRA, hazardous wastes are specifically defined as wastes that exhibit a specific characteristic (toxicity, flammability, ignitability or infectious) or are specifically listed as a hazardous waste in the Subtitle C regulations.
- Household Waste: Solid waste originating from homes and residences. Also called residential or domestic waste.
- HHW, Household Hazardous Waste: Solid wastes from homes and residences that have properties that make them dangerous or capable of having a harmful effect on human health and the environment.
- Industrial Waste: Solid waste originating from industrial processes or manufacturing operations.
- Institutional Waste: Solid waste originating from schools, universities, hospitals, and other institutions.
- Medical Waste: Wastes from hospital and health care facilities and include infectious materials, human pathological wastes, human blood products and used sharps. Also referred to as pathological or infectious wastes.
- Municipal Waste: Solid waste from residential, commercial sources and similar wastes from industrial and institutional sources.
- Organic Wastes: Waste materials, containing carbon compounds that are capable of being degraded biologically into a relatively inert material. Paper wastes, food wastes, wood wastes, lawn and garden wastes, and plant wastes are organic wastes. Metals and glass are not. Plastics contain carbon compounds and are theoretically organic in nature but most plastic wastes are not readily biodegradable.
- Sewage Sludge: A solid, semisolid, or liquid wastes generated from a wastewater treatment plant. Biosolids is the politically correct term for sewage sludge.
- Sharps: Discarded needles and syringes.
- Special Wastes: Is a term that refers to solid wastes that are often separated from mixed municipal wastes for special handling or management. Special wastes include household hazardous waste, tires, batteries, discarded pesticides, discarded electronic equipment and bulky wastes.

**Waste Diversion** - Diverting solid waste from disposal through waste reuse, reduction, recycling or composting.



**Waste Reduction** - Reducing the amount or toxicity of waste generated or reusing materials.

**White goods** - Used major appliances such as washers, dryers, and refrigerators, freezers, air conditions, stove, and water heaters.

**Windrow** - Elongated piles of compostable material, aerated naturally by a chimney effect, by mechanically turning the piles with a machine such as a front-end loader or specially designed equipment, and/or by forced aeration.

**Wood Waste** - Solid waste consisting of wood pieces or particles generated as a by-product or waste from the manufacturing and/or use of wood products, handling and storage of raw materials and trees and stumps. This includes, but is not limited to, dimensional lumber, sawdust, chips, shavings, bark, pulp, and hog fuel but does not include wood pieces or particles containing chemical preservatives such as creosote, pentachlorophenol or copper-chrome arsenate.

**Yard waste** - Grass clippings, leaves and weeds, and prunings from residences or businesses.