

**Division of Solid
Waste Management
2023
Annual Report to the
Governor and General
Assembly**

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Section 1: About This Report

The annual report created by Tennessee Department of Environment and Conservation (TDEC) Division of Solid Waste Management (DSWM), as required by T.C.A. § 68-211-873, provides updates regarding the 2015-2025 Solid Waste and Materials Management Plan (2025 Plan), the Solid Waste Origin Report (SWOR) data, and the Annual Progress Reports (APRs) submitted by the municipal solid waste regions.

This report is to be submitted annually to the Governor and General Assembly.

Outlined in this report are specific data and information required by statute, including:

- ◆ The amount of solid waste disposed of or diverted/recycled by county;
- ◆ Identification of permitted solid waste management facilities;
- ◆ Projection of the remaining life of Tennessee landfills;
- ◆ Updates to the 2025 Plan;
- ◆ Progress toward meeting the State's waste reduction and recycling goals;
- ◆ Updates on Materials Management Grants; and
- ◆ Updates to statewide educational initiatives associated with the 2025 Plan.

“Solid waste” means garbage, trash, refuse, abandoned material, spent material, byproducts, scrap, ash, sludge, and all discarded material, including solid, liquid, semisolid, or contained gaseous material resulting from industrial, commercial, and agricultural operations, and from community activities. Solid waste includes, without limitation, recyclable material when it is discarded or when it is used in a manner constituting disposal.

Definitions

2015-2025 Solid Waste and Materials Management Plan (2025 Plan) - The state solid waste management plan to reduce waste at the state and local level for the period of 2015 through 2025. The purpose of the plan is to achieve identified waste reduction and diversion goals for the same period in fulfillment of T.C.A § 68-211-603.

Annual Progress Report (APR) - The annual report to TDEC that Regions submit that provides a new 10-Year solid waste planning window, progress towards implementing the Region's solid waste plan, and any update to the existing 10-Year solid waste plan, which is due April 1 of the calendar year immediately following the reporting calendar year.

BOPAE- Household Batteries, Oil, Paint, Antifreeze, and Electronics- in terms of Household Hazardous Waste Recycling.

Calendar Year (CY) - The twelve-month period from January 1 through December 31.

Class I Landfill - A sanitary landfill which serves a municipal, institutional, and/or rural population and is used or to be used for disposal of domestic wastes, commercial wastes, institutional wastes, municipal solid wastes, bulky wastes, landscaping & land clearing wastes, industrial wastes, construction/demolition wastes, farming wastes, shredded automotive tires, dead animals, and special wastes.

Class III Landfill - A landfill used or to be used for the disposal of farming wastes, landscaping and land clearing wastes, demolition/construction waste, shredded automotive tires and/or certain wastes having similar characteristics and approved in writing by TDEC.

Compost - Solid waste which has undergone biological decomposition of organic matter, and has been disinfected using composting or similar technologies, and has been stabilized to a degree which is potentially beneficial to plant growth and which is suitable for use as a soil amendment, artificial topsoil, growing medium amendment, or other similar uses.

Conditionally Exempt Small Quantity Generator (CESQG) - Very small quantity generator as defined in Rule 0400-12-01-.01.

Construction and Demolition (C&D) - Construction/demolition wastes means wastes, other than special wastes, resulting from construction, remodeling, repair, and demolition of structures and from road building. Such wastes include, but are not limited to, bricks, concrete, and other masonry materials, soil, rock, lumber, road spoils, rebar, and paving material.

Consumer Price Index (CPI) - A measure of the average change over time in the prices paid by urban consumers for a market basket of consumer goods and services. This measure is used in part to calculate a jurisdiction's waste reduction and diversion goal.

Department of General Services (DGS) – The department responsible for providing goods and services to the State government of Tennessee.

Development District (DD) A region deemed viable to the economic development of the State, created and organized in accordance with T.C.A § 13-14-102 of the Tennessee Code.

Disaster Debris Plan (DDP) – A planning tool that assists local governments in preparing for disaster response in advance to reduce response time, direct debris materials to best end of life management, and define roles and responsibilities of key contacts before an event.

Disposal – Tons reported as landfilled or incinerated by the State or a county for a reporting year and used to calculate progress towards waste reduction and diversion goals.

Division of Solid Waste Management (DSWM) – Division under Environment and Conservation responsible to protect, improve, and promote health and environmental quality through the responsive, effective oversight of waste management activities and the beneficial use of recovered materials.

Employment – A number released by the Bureau of Labor Statistics that represents a jurisdiction and used to calculate a jurisdiction’s waste reduction and diversion goal.

Federal Emergency Management Agency (FEMA) – The Federal agency responsible for emergency management and civil defense.

Fiscal Year (FY) – The twelve-month period from July 1 through June 30 used to designate the operational and accounting year of the state.

Generation – The total amount of materials disposed in landfills, recycled, composted, or converted to energy used to calculate the county, region, or state waste reduction goal or for grant offerings.

Go Green with Us (GGWU) - A partnership between TN State Parks' staff and visitors to become better stewards of our natural and financial resources through the integration of common-sense sustainability practices into park management and operations.

Grants Management System (GMS) - TDEC's electronic grant application and project management program accessible to stakeholders through the website.

Hazardous Waste Inspection Training - Statewide Hazardous Waste Inspector Training (HWIT) program for hazardous waste generators geared to improve customer compliance during hazardous waste inspections by clarifying the expectations of inspectors in accordance with DSWM policy and state regulations.

Hazardous Waste Operations and Emergency Response (HAZWOPER) - A set of guidelines produced and maintained by the Occupational Safety and Health Administration which regulates hazardous waste operations and emergency services in the United States.

High Density Polyethylene (HDPE) Plastic Resin #2 - A thermoplastic polymer made from petroleum used in a wide variety of applications including bottles, milk jugs, shampoo bottles, bleach bottles, cutting boards, and piping commonly noted by resin code #2.

Household Hazardous Waste (HHW) - Any unwanted or spent household product that can easily catch fire (flammable), eat away at or irritate living tissue (corrosive), react violently with water or other chemicals (reactive), or be poisonous to humans and animals (toxic).

Household Hazardous Waste Collection Facility - One of the permanently located HHW collection sites located in Memphis, Nashville, Chattanooga, Cookeville, or Knoxville that provides continuous collection throughout the year and often provides collection services to surrounding counties.

Household Hazardous Waste Mobile Event - Periodic state-sponsored household hazardous waste collection services scheduled in selected counties in the spring or fall of the year, as requested by local governments based on availability.

Household Hazardous Waste Temporary Storage - Temporary storage buildings funded by TDEC via grants to the counties that allow for the temporary storage of household hazardous waste until a time can be scheduled with the state contractor to pick up collected materials.

ICI Sector (ICI) - Short for Industry-Commercial-Institutional Sector that includes manufacturing plants, retail and office operations, and public institutions. Any premises that TDEC does not consider residential would fall to this sector.

Integrated Solid Waste Management Systems (ISWMS) - A coordinated and systematic approach to sustainable management of solid waste and its facilities designed and based on transportation, economy, and efficiency with the ultimate goal to reduce the amount of wastes going to landfills.

Landfill – A facility, other than a land application unit, where solid wastes are disposed of by burial in excavated pits or trenches or by placement on land and covering with soil or other approved material.

Landfill Operator Certification Training (LOCT) - A three-day classroom instruction and exam that covers Tennessee solid waste regulations, statutes, landfill operations and design, and record keeping.

Low-Density Polyethylene (LDPE) Plastic Resin #4 - A thermoplastic polymer that is a soft, flexible, lightweight plastic material. LDPE is noted for its low temperature flexibility, toughness, and commonly denoted by resin code #4.

Material Recovery Facility (MRF) - A material reclamation facility designed to sort and bundle various commingled materials from residential or commercial sectors.

Materials Marketplace (MMP) - Creates a collaborative network of businesses, organizations, and entrepreneurs where one organization's hard-to-recycle waste and by-products become another organization's raw material.

Milk Run - A process where counties will collect materials at their facilities, and the contractor will pick up these materials at a lower price because contractor labor is not required. Packaging and containers will be provided for the milk run commodities.

Mixed Office Paper (MOP) - One of the major recycling fiber grades comprised of a mix of two of the following grades- Newspaper, office paper, and kraft/cardboard.

Office of Sustainable Practices (OSP) - The business unit at TDEC that has three primary service areas: Business, Community, and State Government and Institutions. Each service area provides programs, resources, and technical assistance that promote environmental sustainability and resilience throughout Tennessee.

Old Closed Landfill (OCL) - A publicly owned class I landfill permitted by TDEC that is now closed and does not have a composite liner system in place, where TDEC determined that the landfill is causing harm to health or the environment through contamination of groundwater.

Old Corrugated Cardboard (OCC) - A fiber grade that covers those boxes where the materials are made from three separate layers of paper, two liners, and a corrugated or wavy layer sandwiched between them.

Old News Print (ONP) - A low-cost, non-archival paper consisting mainly of wood pulp and mostly used to print newspapers and other publications.

Organics Management (OM) - The management practice of taking materials that are carbon-based compounds (that come from living things) and are readily biodegradable and converting them to a valuable resource rather than a waste. This includes composting (see definition above), food recovery, and the management of reclaimed fats, oils, and greases to beneficial and social uses.

Polyethene Terephthalate (PET or PETE) Plastic Resin #1 - The chemical name for polyester, a plastic resin, that is clear, strong, and is used as packaging for foods and beverages, especially convenience-sized soft drinks, juices, and water.

Polypropylene (PP) Plastic Resin #5 - A thermoplastic polymer versatile plastic resin that is widely used in a variety of applications, such as food tubs made from propylene monomers.

Polystyrene (PS) Plastic Resin #6 - A hard, stiff, brilliantly transparent synthetic resin produced by the polymerization of styrene. It is widely employed in the food-service industry as rigid trays and containers, disposable eating utensils, and foamed cups, plates, and bowls.

Polyvinyl Chloride (PVC) Plastic Resin #3 - A high-strength thermoplastic resin widely used in construction and building applications such as pipes, medical devices, wire, and cable.

Population – The number released by the United States Census Bureau that represents a jurisdiction’s population estimate. For this report, it represents the population estimates released in the first week in April of the year reviewed and used to calculate progress towards a jurisdiction’s waste reduction and diversion goals.

Radio Frequency Identification (RFID) - Refers to a technology whereby specialized readers communicate with encoded tags or smart labels similar to bar codes placed on vehicles, containers, bins, or carts to capture encoded digital data such as location, stop, or vehicle identification. Solid waste systems use the technology to improve performance and efficiency.

Recycled Materials Processing Facility (RMPF) - A facility engaged solely in the storage, processing and resale or reuse of recovered materials. A recovered materials processing facility is not a solid waste processing facility.

Recycling Equipment (RE) Grant - A matching grant program defined by T.C.A § 68-211-825(a) for procurement of key pieces of recycling equipment including, but not limited to, recycling carts made with recycled content and embedded RFID tags, containers, compactors, balers, glass crushers, sorting systems, and forklifts.

Recovered Materials - Waste material and byproducts which have been recovered or diverted from solid waste. This term does not include those materials and byproducts generated from, and commonly reused within, an original manufacturing process.

Recycling Rebate (RR) - A statutory rebate defined by T.C. A § 68-211-825(b) for the top 5 most populous counties, provided in lieu of a recycling equipment grant allocated proportionally by population for those local governments that provide solid waste services within the qualifying five counties.

Region - A municipal solid waste Region organized pursuant to T.C.A. § 68-211-813(a).

Solid Waste Assistance Program - The original TDEC program designated to implement the Solid Waste Management Act of 1991. The predecessor of the current Materials Management Program.

Solid Waste Association of North America (SWANA) - An organization of more than 10,000 public and private sector professionals committed to advancing from solid waste management to resource management through their shared emphasis on education, advocacy, and research.

Solid Waste Management Act of 1991 (SWMA) - The 1991 Act outlines a comprehensive process for handling Tennessee's municipal solid waste on a regional basis by promoting solid waste planning, sustainable funding, technical assistance, and goals to maximize the beneficial reuse of materials and minimize those materials being disposed of in landfills.

Solid Waste Management Fund (SWMF) - A state special revenue fund established under T.C.A. § 68-211-821 to fund the authorized implementation activities of the Solid Waste Management Act of 1991.

Solid Waste Management Systems (SWMS) - Solid Waste systems that facilitate the beneficial reuse of materials from the municipal and commercial waste stream, such as trash, recycling, and organic management solutions.

Solid Waste Regulatory Program - The TDEC program responsible for implementation of the Solid Waste Disposal Act (Title 68, Chapter 211, Part 1) and the supporting rules.

Solid Waste Uniform Inspection Training (SUIT) - A training program designed to provide solid waste facility operators and employees with a basic knowledge of the state facility inspection program. SUIT provides information regarding the policies and regulatory citations associated with each item on the inspection document.

Sorted Office Paper (SOP) - 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.

Southeast Recycling Development Council (SERDC) - A non-profit agency that TDEC contracted to engage the public and industries of the state to foster greater recycling, improve communication amongst recyclers and their sources, promote sustainable recycling programs, and coordinate education and public awareness activities related to recycling.

Standard Industry Classification (SIC) - A four-digit number system used by government agencies to classify industry types.

Taxable Sales – A formula-derived measure based on Department of Revenue data that represents sales in a given jurisdiction and used to calculate that jurisdiction’s waste reduction and diversion goal.

Tennessee Department of Environment and Conservation (TDEC) - The Tennessee cabinet-level agency that exists to enhance the quality of life for citizens of Tennessee and to be stewards of our natural environment by: Protecting and improving the quality of Tennessee's air, land, and water through a responsible regulatory system.

Tennessee Department of Transportation (TDOT) - The Tennessee cabinet-level multimodal agency with statewide responsibilities in roadways, aviation, public transit, waterways, and railroads. The mission of TDOT is to provide a safe and reliable transportation system for people, goods, and services that support economic prosperity in Tennessee.

Tennessee Emergency Management Agency (TEMA) - The agency responsible for coordinating preparedness, response, and recovery from man-made, natural, and technological hazards in a professional and efficient manner in concert with our stakeholders.

Tennessee Recycling Coalition (TRC) - A tax-exempt organization structured under section 501(C)3 of the Internal Revenue Code. It is a non-profit organization dedicated to promoting recycling and sustainable materials management practices in Tennessee.

Tennessee School Laboratory Rehabilitation Program (TSLRP) - A DSWM program that provides schools with an opportunity to learn about chemical safety practices and information for the safe disposal of hazardous wastes from public school premises.

Tennessee Solid Waste Directors' Association (TSWDA) - An association of county-level solid waste professionals organized to provide education and outreach for its membership through networking meetings and organized trainings.

Tennessee Training Academy (TTA) - A partnership between TDEC, SWANA's Tennessee Chapter, SERDC, TRC, TSWDA, and UT-CTAS to improve the industry knowledge of Tennessee's solid waste professionals.

The Recycling Partnership - A national nonprofit organization with a mission to transform recycling in towns across the country that works hand-in-hand with communities and companies, continuously innovating to improve recycling systems.

Tire - A continuous solid or pneumatic rubber covering encircling the wheel of a motor vehicle; a rubber cushion that fits around a wheel (as of an automobile) and usually contains compressed air; a rubber ring placed over the rim of a wheel of a road vehicle to provide traction and reduce road shocks, a hollow inflated ring consisting of a reinforced outer casing enclosing an inner tube.

Tire Derived Aggregate (TDA) – A compilation of materials from shredded scrap tires and used in a wide range of construction projects. These uses include retaining wall backfill, lightweight embankment fill, landslide stabilization, vibration mitigation, and various landfill applications.

Tire Environmental Act (TEA) - The statute found in Tennessee Code Annotated T.C.A § 68-211 Part 3 that authorizes the selection and funding of projects that best result in one of the beneficial end uses for waste tires for the state. Fees collected from the sale of new cars (based on the tires present on the new car) provide revenue to implement the Act.

Tire Environmental Act Program (TEAP) - The TDEC program responsible for implementing the Tire Environmental Act.

Tire Environmental Fund (TEF) - The special revenue fund created and authorized under T.C.A § 68-211-304 to implement the Tire Environmental Act under the same Part.

Underground Storage Tanks-Solid Waste Disposal Control Board (UST-SWCB) - The Governor-appointed board that provides oversight of TDEC departmental programs of underground storage tanks and on solid waste management issues.

United States Business Council for Sustainable Development - An action oriented and member-led nonprofit business association that harnesses the power of collaborative projects, platforms, and partnerships to develop, deploy, and scale solutions to ecosystems, carbon, energy, materials, and water challenges.

United States Environmental Protection Agency (US EPA) - The federal agency responsible for protecting human health and the environment.

University of Tennessee's Center for Industrial Services (CIS) - A University of Tennessee Institute of Public Service agency that provides technical assistance to industry and manufacturing entities.

University of Tennessee's County Technical Assistance Service (CTAS) - A University of Tennessee Institute of Public Service agency that provides technical assistance to county governments.

Urban Green Lab (UGL) - A 501(C)3 non-profit organized to provide sustainability education through a mobile laboratory.

Waste Reduction Task Force (WRTF) - The taskforce created in 2007 by the Solid Waste Advisory Committee to look into the big picture of how Tennessee manages its solid waste and recycle material streams to set future goals and establish a method to measure it.

Acronyms and Context

Acronym	Acronym Context
2025 Plan	2015 - 2025 Solid Waste and Materials Management Plan
AER	Annual Engineering Report
APR	Annual Progress Report
C&D	Construction and Demolition
CTAS	County Technical Assistance Service (University of Tennessee)
CY	Calendar Year
DD	Development District
EPA	U.S. Environmental Protection Agency
FY	Fiscal Year
FY23	July 1, 2022, to June 30, 2023
FY24	July 1, 2023, to June 30, 2024
HHW	Household Hazardous Waste
MSW	Municipal Solid Waste
MSWPR	Municipal Solid Waste Planning Regions
OSP	Office of Sustainable Practices
p/p/d	Pounds Per Person Per Day
SWM	Solid Waste Management
SWMA	Solid Waste Management Act
SWMF	Solid Waste Management Fund
SWOR	Solid Waste Origin Report
T.C.A.	Tennessee Code Annotated
TDEC	Tennessee Department of Environment and Conservation
TEAP	Tire Environmental Act Program

What is Measured?

TDEC measures solid waste using two categories:

1. As defined by T.C.A. § 68-211-802, “**municipal solid waste**” means any garbage, refuse, industrial lunchroom or office waste, household waste, household hazardous waste, yard waste, and any other material resulting from the operation of residential, municipal, commercial or institutional establishments and from community activities; provided, that “municipal solid waste” does not include the following:
 - a. Radioactive waste;
 - b. Hazardous waste as defined in T.C.A § 68-212-104;
 - c. Infectious waste;
 - d. Materials that are being transported to a facility for reprocessing or reuse, provided further that reprocessing or reuse does not include incineration or placement in a landfill; and
 - e. Industrial waste, which may include office, domestic, or cafeteria waste, is managed in a privately owned solid waste disposal system or resource recovery facility if the waste is generated solely by the owner of the system or facility.
2. As defined in TDEC rule 0400-11-01 states, “**construction/demolition wastes**” means wastes, other than special wastes, resulting from construction, remodeling, repair, and demolition of structures and from road building. Such wastes include, but are not limited to, bricks, concrete and other masonry materials, soil, rock and lumber, road spoils, rebar, and paving materials.

Annual Diversion and Recycling Goal

1. Divert and recycle 25% of MSW from Class I landfills.
2. Adhere to the 2025 Plan Objectives, which include increasing access to and participation in recycling, increasing diversion of organics, and supporting new diversion technology.

Data Sources

1. Permitted solid waste facilities are required to submit quarterly or annual reports to TDEC on the amount of solid waste disposed of or exported.

2. County governments are required to submit annual reports to TDEC with the amount and type of MSW recycled in their jurisdiction.
3. Institutions are encouraged, but not required, to submit annual reports to TDEC or their county recycling coordinator on the amount and type of material recycled.
4. Businesses (e.g., commercial, industrial) are encouraged, but not required, to report recycling data to TDEC or their county recycling coordinator.
5. The U.S. Census Bureau provides population data from its "QuickFacts." The data used in this report reflects Tennessee's estimated population as of July 1, 2023. The annual estimates are predicted based on the current 2020 10-year census count.

POUNDS PER PERSON PER DAY DISPOSAL	=	$\frac{\text{TONNAGE}}{\text{POPULATION}} \times 2,000 \div 365$
RECYCLING RATE (%)	=	$\frac{\text{AMOUNT RECYCLED}}{\text{AMOUNT GENERATED*}} \times 100$
*Generation = Recycled + Disposed Of		

Section 2: Executive Summary

County governments and landfills are required to report by the calendar year (January to December 2023 or CY23). Therefore, any reported material and implementation efforts are based on the calendar year, except for grant funding. Grant funding allocation is based on the fiscal year (July 2022 to June 2023 or FY23). A summary of Tennessee's waste disposal, diversion, and recycling data is shown in Table 2.0.

Table 2.0: Municipal Solid Waste Summary (CY23)

Population	7,204,002.00
MSW Disposed (Tons)	9,403,860.91
MSW Diverted and Recycled (Tons)	8,787,925
MSW Generated (Tons)	18,191,785.91
MSW Diverted and Recycled Rate	48%
MSW Disposal Rate (p/p/d)	7.3
Diversion/Recycling Disposal Rate (p/p/d)	6.8

Report Highlights

1. Tire Environmental Act Program (TEAP) distributed almost \$9.2 million in grant funding and diverted over 1.4 million tires from landfills.
2. The Division of Solid Waste Management provided nearly \$3 million in grant funding.
3. Forty-seven (47) household hazardous waste mobile events were held across the state.
4. Objective team leaders worked to bring together subject matter experts and other stakeholders from industry, academia, non-governmental organizations, and other non-profits for the 2025 Plan.
5. Tennessee exported 1,280,243 tons and imported 794,319 tons of solid waste in CY23.
6. Sixty-five (65) of 66 Municipal Solid Waste Regions passed the State's diversion and recycling goal.

Section 3: 2015-2025 Solid Waste Materials Management Plan

Since April 2015, TDEC has focused efforts toward effectively implementing the 2025 Plan. Progress toward plan objectives is detailed in this annual report, updates provided to the Underground Storage Tanks and Solid Waste Disposal Control Board, and through public meetings and conferences. The 2025 Plan is TDEC's strategic roadmap containing broad objectives and ideas to reduce disposal and increase recycling in Tennessee, and it does not change or modify Tennessee statutes or rules.

Objective Summaries

Objective 1: Update Goals and Measure Progress

Establish more robust solid waste management goals to measure the disposition of Municipal Solid Waste in Tennessee more accurately and to better assess progress toward achieving those goals.

Objective 2: Increase Access to and Participation in Recycling

Expand the breadth of recycling, making sure access to convenient recycling programs is available to all Tennesseans, as well as expanding participation in recycling programs.

Objective 3: Enhance Processing and End Markets

Facilitate closing the materials processing gaps and increasing the opportunities for end-uses of recovered materials in Tennessee, to incentivize increased diversion and simultaneously strengthen the State's economy.

Objective 4: Increase Diversion of Organics

Encourage the reuse, composting, and beneficial use of organics, as well as implement source reduction efforts, to decrease the disposal of these materials.

Objective 5: Support New Diversion Technology

Support the adoption of new technologies in the state, as appropriate, that will help Tennessee move closer to reaching its waste reduction and diversion goals.

Objective 6: Expand and Focus Education and Outreach

Improve education and outreach in Tennessee regarding the opportunities for source reduction, recycling, composting, and the benefits of these activities relative to disposal.

Objective 7: Ensure Sufficient and Environmentally Sound Disposal

Monitor MSW disposal capacity to be sure it is sufficient and ensure that disposal facilities are maintained in an environmentally sound manner.

Objective 8: Develop Sustainable Funding Sources for Sustainable Materials Management

Ensure that the state and local governments have sustainable funding sources in place to develop and support programs to manage municipal solid waste and materials.

Appendix C: Disaster Debris Management Plan

Develop programs to assist counties in ensuring they have all the tools and information they need when a natural disaster occurs. Disaster Debris Management planning is critical to county preparedness and therefore this appendix will be included as an additional objective in the 2025-2035 Solid Waste and Materials Management Plan.

CY23 Plan Updates

Objective 1 Update Goals and Measure Progress

- ◆ establishing a new solid waste goal;
- ◆ ensuring the data collected accurately captures the disposition of MSW in Tennessee; and
- ◆ ensuring a better way to assess the progress made toward achieving solid waste goals.

In CY23, TDEC worked on improving data collection management, reviewing procedures, and establishing guidance on data received from permitted facilities. For example, after annual progress reports are submitted to TDEC from Municipal Solid Waste Planning Regions, TDEC performs quality assurance and quality control on the data to ensure accuracy.

The Objective 1 team assessed the goals in the 2025 Plan and identified and proposed new processes for the upcoming 2025-2035 Solid Waste and Materials Management Plan regarding diversion goals. In 2023, DSWM staff provided numerous training opportunities, virtual and in-person, to stakeholders to assist with the transition from using Re-TRAC Connect to an internally developed form submission portal and database, known as MyTDEC Forms and RecycleBin. This shift allows TDEC to manage and access data in ways that best serve both internal and external users while maintaining flexibility in system design. Additionally, this transition resulted in cost savings by eliminating the need for third-party data management services. To support the strategies in this objective, the focus was on validating and migrating data from the previous data management system, ReTrac.

Objective 2: Increase Access to and Participation in Recycling

The goal of this objective is to increase Tennessee residents' recycling participation by making recycling convenient and readily available. Counties and municipalities in Tennessee provide waste collection through convenience centers. Convenience centers are permitted locations that are staffed and fenced, with receptacles on site, and are open to the public when an attendant is present (T.C.A. § 68-211-802). After a convenience center is established and accepting waste, adding recycling options at the facility typically increases residential participation in recycling, as residents are already familiar with the site. Additionally, the goal is to make recycling affordable for counties by leveraging economies of scale when solid waste regions work together to use waste collection options, such as a hub-and-spoke model.

In CY23, five (5) counties relied on unmanned county collection containers to manage garbage. These containers provide low levels of service to residents. To assist with providing higher levels of service, TDEC offers grants to counties and municipalities to establish permitted convenience centers for waste and recycling collection.

The Objective 2 team consists of industry and local government leaders who identified opportunities to improve recycling efficiencies, such as the hub-and-spoke model. Additionally, the team continues to build on efforts that pair recycling and disposal collection to increase recycling participation across the state. The primary focus of this objective team has been to ensure that recycling and composting options are just as accessible, simple, and convenient as disposal. This team works to identify ways to increase cost savings through partnerships in industrial, commercial, and institutional settings.

Objective 3: Enhance Processing and End Markets

The goal of Objective 3 is to increase end markets for recovered materials in Tennessee while closing material processing gaps.

To find new end markets for recovered materials, TDEC helps facilitate opportunities for public-private partnerships for the collection and processing of recyclable materials. For example, during CY23, TDEC's Office of Sustainable Practices (OSP) helped fund five Tire Environmental Act Program contracts newly approved during the 2023 grant application cycle to encourage end-use market competition in Tennessee.

To address end-market gaps, TDEC partnered with the University of Tennessee's County Technical Assistance Service (CTAS), the Tennessee chapter of the Solid Waste Association of North America (SWANA), Tennessee Solid Waste Directors Association (TSWDA), the Tennessee Recycling Coalition (TRC), and Southeast Recycling Development Council (SERDC) to form the Tennessee Training Academy (TTA).

The TTA provides training opportunities to county solid waste professionals that would otherwise be out of reach due to the personal costs involved. By participating in TTA, solid waste professionals gain knowledge and skills they can apply in their work and share with their colleagues. As a result, the benefits of the program extend beyond the individual participants and contribute to the improvement of solid waste management practices across Tennessee.

Objective 4: Increase Diversion of Organics

TDEC made substantial progress toward this objective in the past year. In CY23, Food Waste Prevention Week (FWPW) events were hosted virtually and in person at Memphis, Nashville, and Chattanooga. These events provided education and outreach for commercial and residential food waste reduction, recovery, and diversion.

The Objective 4 team leader placed emphasis on composting through restaurants across the state. In the future, the team leader will identify how to continue building on past successes and pave the way for future composting. Initiatives such as the TN Tower Composting Pilot, Tennessee State Parks Food Recovery Challenge, and Metro Nashville Food Scraps Pickup are examples of successfully launched recovery programs.

Objective 5: Support New Diversion Technology

The goal of Objective 5 is to support new technologies in Tennessee to move closer to reaching the waste reduction and diversion goals. TDEC aids local governments that are considering projects using new technologies through technical assistance and grant offerings. By converting the “composting grant” into an “organics management grant,” it allows new technology such as anaerobic digestion, anaerobic fermentation, gasification, biodiesel production, biomass-to-energy, and pyrolysis to be eligible to receive grant funding.

As alternative energy sources, such as electric vehicle batteries and solar panels, come to the end of their life, the need to identify recycling technology is essential for proper disposal. Therefore, the work being completed in this objective will continue into the 2025-2035 Solid Waste and Materials Management Plan.

Objective 6: Expand and Focus Education and Outreach

Education has been focused on activities that keep materials out of Class I landfills.

These activities include:

- ◆ Source Reduction
- ◆ Recycling
- ◆ Composting

Education and outreach depend on a messenger’s ability to convey solid waste management messaging to stakeholders. TDEC promotes education and outreach efforts that unify recycling messaging statewide. This is accomplished by simplifying what can or cannot be recycled at county or municipal convenience centers through the Recycle Right Campaign <https://recyclerighttn.com/>. The Recycle Right Campaign is utilized across the US EPA Region 4.

Additionally, TDEC meets the strategies laid out in Objective 6 by increasing Household Hazardous Waste (HHW) services to local governments. Technical staff assist local governments in promoting collection services for HHW, batteries, oil, paint, antifreeze, and electronics (**BOPAE**). TDEC provides information about HHW collection events on the TDEC website and through bi-monthly newsletters.

Work done in this objective will always be necessary because education and outreach are essential components to any successful recycling program. Education and outreach generate awareness and enthusiasm for waste reduction and recycling and instruct citizens how to properly participate in such programs.

Objective 7: Ensure Sufficient and Environmentally Sound Disposal

The goal of Objective 7 is to monitor disposal capacity to be sure it is sufficient and ensure that disposal facilities are maintained in an environmentally sound manner.

Annually, DSWM assesses the usage and remaining permitted disposal capacity of Tennessee Class I landfills through the Annual Engineering Report (AER). Much of the focus on this objective has included improved AERs, improved scale processing at transfer stations, and the consideration of a ban on electronics at Tennessee Class I landfills. The capacity information is provided to local governments to ensure landfills have enough airspace and remaining life density to accept waste.

DSWM also collects an annual solid waste origin report (SWOR) from Class III and Class IV landfills. The SWOR assists in calculating the 25% diversion goal. DSWM's Materials Management Program helps ensure that the SWOR data collected is accurate. The data is provided to APR authors and counties to ensure the State's 25% diversion goal is met. SWOR data is also shared with the EPA to aid in national and regional recycling surveys.

The AER and SWOR data are crucial for local governments' ability to plan for equipment purchases, facility expansion, and their 10-year Solid Waste Master Plans.

Objective 8: Develop Sustainable Funding Sources for Sustainable Materials Management

The goal of Objective 8 is to find sustainable funding for state and local governments to develop and support programs to manage MSW and recyclable materials.

Here is the breakdown of current funding for solid waste management:

- ◆ The current means of funding Solid Waste Management Act (SWMA) projects derives its origins from the disposal of solid waste in landfills through a \$0.90 surcharge on each ton disposed of in Tennessee's Class I Landfills.
- ◆ The Solid Waste Regulatory Program receives \$0.35 per ton for waste disposed in Class I landfills, which is used to fund regulatory activities.
- ◆ The Solid Waste Management Fund (SWMF) received \$0.25 from the Department of Revenue from the pre-disposal fee for each new tire sold.

As waste diversion from landfills increases and new technologies improve, the funding sources decrease. Therefore, it is important to establish additional and different ways to fund solid waste management.

Sustainable funding is key to the implementation of every objective in the 2015-2025 Plan. As described in the previous objective summaries, funds support improvements to the integrated solid waste systems of the state, provide education and outreach support to local governments, aid in the cleanup of unpermitted tires and other waste disposal sites, and address orphaned landfills.

An additional funding concern relates to the disposal of waste out of state. Waste produced in Tennessee is often disposed out of state and is not subject to the SWMF surcharge on tipping fees. Therefore, funding for waste management should be tied to other sources rather than exclusively to waste disposal.

The Objective 8 team studied various options regarding regional landfills and gathered data through surveys and county budget reviews. While other objective leaders are TDEC employees, currently, the Objective 8 team leader is a CTAS employee. This team leader's statewide knowledge of county budgets and funding shortfalls is invaluable to reaching the objective goal.

Appendix C: Disaster Debris Management Plan

In conjunction with the Department of Agriculture and the Tennessee Emergency Management Agency (TEMA), TDEC has developed a template for local governments' use in the preparation of disaster debris management plans (DDMP). The focus of this objective has been on educational opportunities and better methodology for capturing debris disposal data.

The SWMA requires local governments to prepare DDMP. Requirements within the DDMP establish contracts and debris staging points before a disaster occurs. By establishing and obtaining the temporary staging permit approval in advance, response time is reduced. These plans also dictate where materials will be directed to minimize volumes sent to landfills.

Throughout CY23, DSWM presented at numerous conferences, such as the Tennessee Environmental Network Show of the South (TENSOS), in collaboration with Metro Nashville. At these presentations, stakeholders share knowledge and best practices regarding DDMP planning, pre-event staging areas, and other critical aspects of emergency preparedness. By providing an opportunity to discuss the topic of disaster debris, it allows various parties to come together and share ideas. The Materials Management Program and Solid Waste Program work to ensure that Tennessee's solid waste management system is equipped to respond effectively in the event of a disaster, thereby protecting both public health and the environment.

Section 4: Landfills and Disposal

TDEC rule 0400-11-01-.09(5) requires permitted public and private solid waste Class I, III, and IV landfills to report to TDEC the county of origin and tonnage of material collected and disposed.

All solid waste not recovered is primarily disposed of in landfills with a small amount incinerated or exported.

In CY23, Tennessee had 106 permitted solid waste landfills that were accepting waste as seen in Figure 4.0.

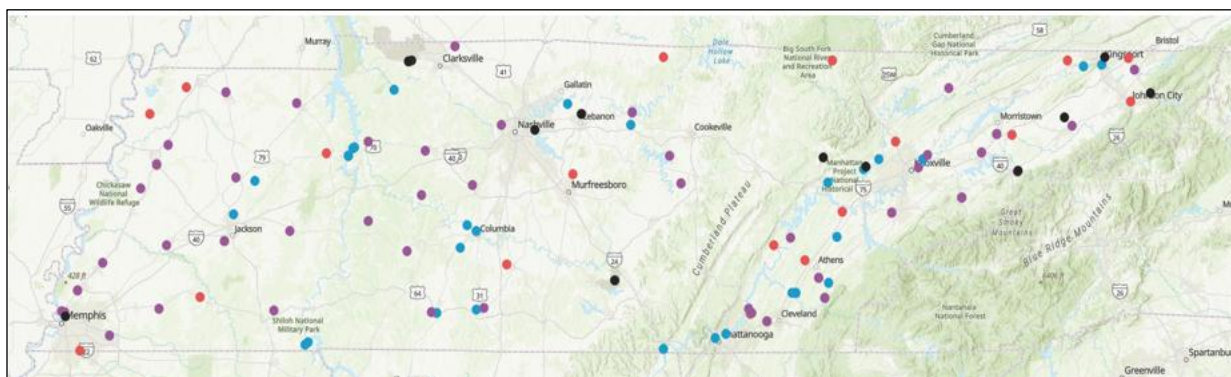


Figure 4.0: Class I (red), Class II (blue), Class III (purple), and Class IV (black) landfills in Tennessee.

Quick Definitions

- ♦ Class I landfills take non-hazardous municipal solid waste (MSW) such as household waste, approved special waste, and commercial waste.
- ♦ Class II landfills take non-hazardous industrial waste, commercial waste and fill. These landfills accept waste only from the company that holds the permit. They can only accept specifically approved wastes generated by that company.
- ♦ Class III landfills take Class IV wastes plus landscaping, land clearing and farming waste.
- ♦ Class IV landfills take construction and demolition waste, shredded tires, and waste with similar characteristics. DSWM no longer issues permits for this class of landfill and the ones that do exist are considered legacy permits.

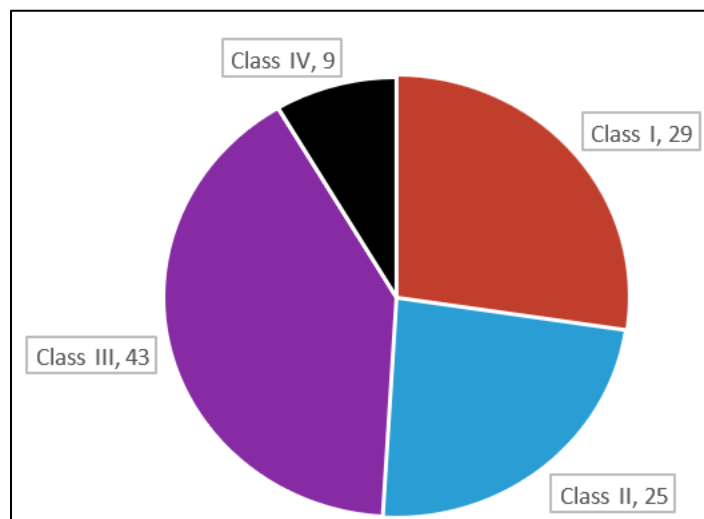


Figure 4.1: Total number of landfills that accept waste (106 facilities) by landfill type. Class I (red) 29 landfills, Class II (blue) 25 landfills, Class III (purple) 43 landfills, and Class IV (black) 9 landfills.

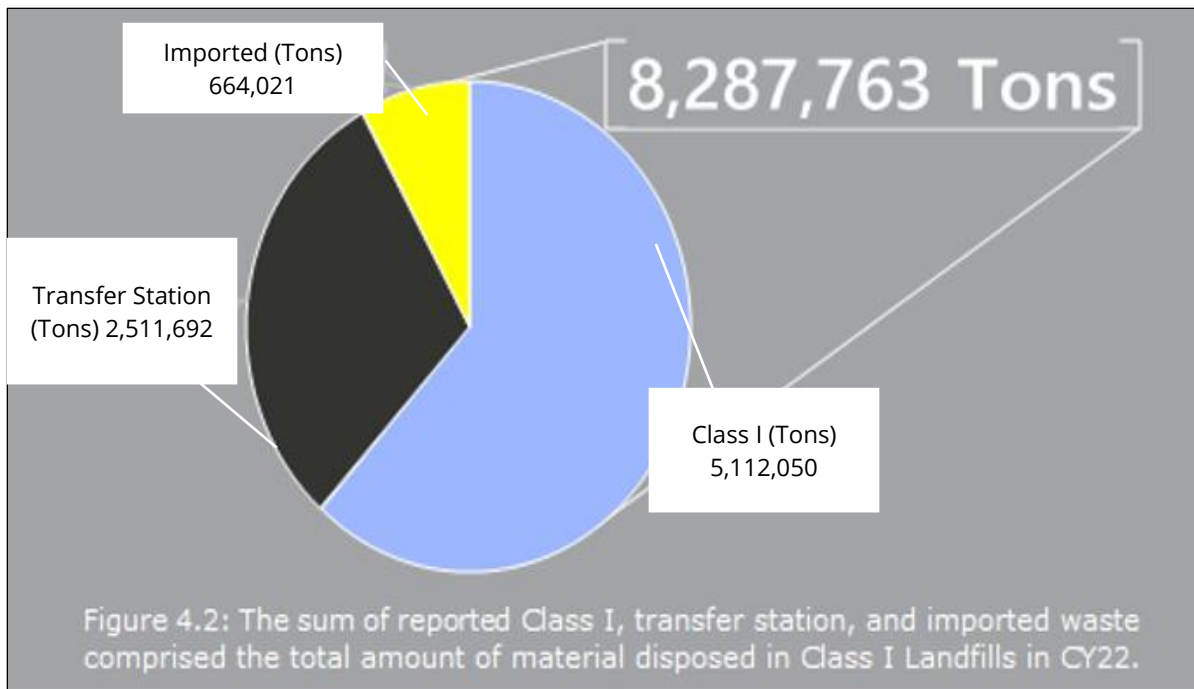


Figure 4.2: The sum of reported Class I (5,112,050), transfer station (2,511,692 tons), and imported waste (664,021 tons) comprised the total amount of material (8,287,763 tons) disposed in Class I Landfills in CY22.

Table 4.0: Accepted Material (Tons) and Remaining Life of Class I Landfills in CY23

Facility Name	Facility Location (County)	Remaining Landfill Life	Accepted Materials (Tons)
Chestnut Ridge Landfill	Anderson	47 years	440,416
West Camden Landfill	Benton	19 years	526,365
Alcoa/Maryville/Blount County	Blount	50+ years	128,856
Bradley County Landfill	Bradley	19 years	357,360
Upper Cumberland Landfill	Clay	2 years	35,926
Decatur County Landfill	Decatur	Final Cover	-
Dyersburg City Landfill	Dyer	35 years	31,077
Hamblen County/Morristown	Hamblen	1 year, 4 months	45,645
Lakeway Recycling & Sanitation	Hamblen	6 years, 2 months	227,825
City of Chattanooga Landfill	Hamilton	50+ years	33,623

Facility Name	Facility Location (County)	Remaining Landfill Life	Accepted Materials (Tons)
Bolivar/Hardeman County Landfill	Hardeman	Cannot Calculate*	14,286
Carter Valley Landfill	Hawkins	50+ years	115,135.15
Loudon County Landfill	Loudon	2 years, 4 months	146,958
Madison County Dev LLC	Madison	41 years	241,771
Cedar Ridge Landfill	Marshall	8 years, 10 months	707,261
Meadow Branch Landfill	McMinn	11 years	803,316
Bi County Landfill	Montgomery	8 years, 10 months	317,168
Northwest TN Disposal Corp. Landfill	Obion	32 years	178,426
ECM of Ridgely Landfill	Obion	50+ years	31,169
Rhea County Sanitary Landfill	Rhea	1 year, 10 months	355,361
BFI Middle Point Landfill	Rutherford	6 years, 5 months	1,037,030
Volunteer Regional Landfill	Scott	24 years	330,759
Sevier Solid Waste Inc.	Sevier	7 years	18,976
BFI South Shelby Landfill	Shelby	21 years	1,045,916
BFI North Shelby Landfill	Shelby	50+ years	309,003
Smith County Landfill	Smith	6 months	230,447
Eco-Safe Systems, LLC	Sullivan	50+ years	568,752
Iris Glen Environmental	Washington	17 years	176,951
White County Landfill	White	1 year, 2 months	75
Total			8,455,833.15

*Facility did not receive waste in calendar year 2023 but is working to resume waste receipts in the future.

**Table 4.0 shows the Class I facilities that accepted waste in CY23, and their remaining lifespans.

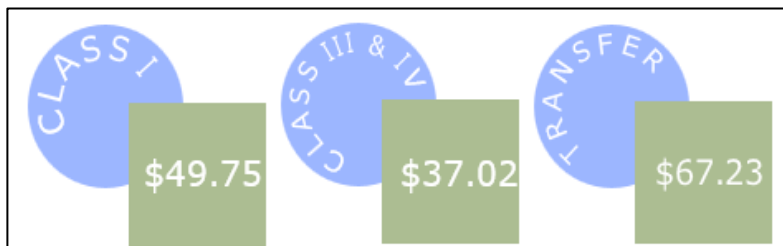


Figure 4.3: Average reported tipping fees from Class I (\$49.75), Class III & IV (\$37.02), and transfer

stations (\$67.23).

-Note: All 30 Class I landfills reported tipping fees, 24 of 53 Class III & IV landfills reported tipping fees, and 63 of 73 transfer stations reported tipping fees.

Imported and Exported Solid Waste

Tennessee imports and exports solid waste. Most of the imported solid waste is MSW but includes other material. Most solid waste in Tennessee is disposed of in Class I landfills.

For annual progress reporting purposes, imported solid waste is not counted as part of the state's solid waste generation as the waste is generated out of the state. Waste generated in Tennessee and exported to other states is counted.

Key takeaways on the import and export of solid waste in CY22.

- ◆ Tennessee accepted 764,296 tons of out-of-state solid waste for disposal in Class I landfills.
- ◆ Solid waste was imported from Alabama, Arkansas, Georgia, Kentucky, Mississippi, Missouri, North Carolina, Virginia, and West Virginia (see Figure 4.4).
- ◆ Nineteen Class I landfills accepted imported waste by direct haul or through a solid waste processing facility (see Table 4.1).
- ◆ Tennessee exported 1,280,243 Tons of MSW in CY22 to Georgia, Kentucky, and Mississippi (see Figure 4.5). Twenty-eight counties exported waste. Of these counties, Davidson (16%), Montgomery (8%), and Shelby (47%) exported the highest percentage of waste.
- ◆ Tipping fees are not charged in Tennessee for exported waste. Therefore, funding for Solid Waste Regulatory Program and solid waste grants is not raised when waste leaves the state.

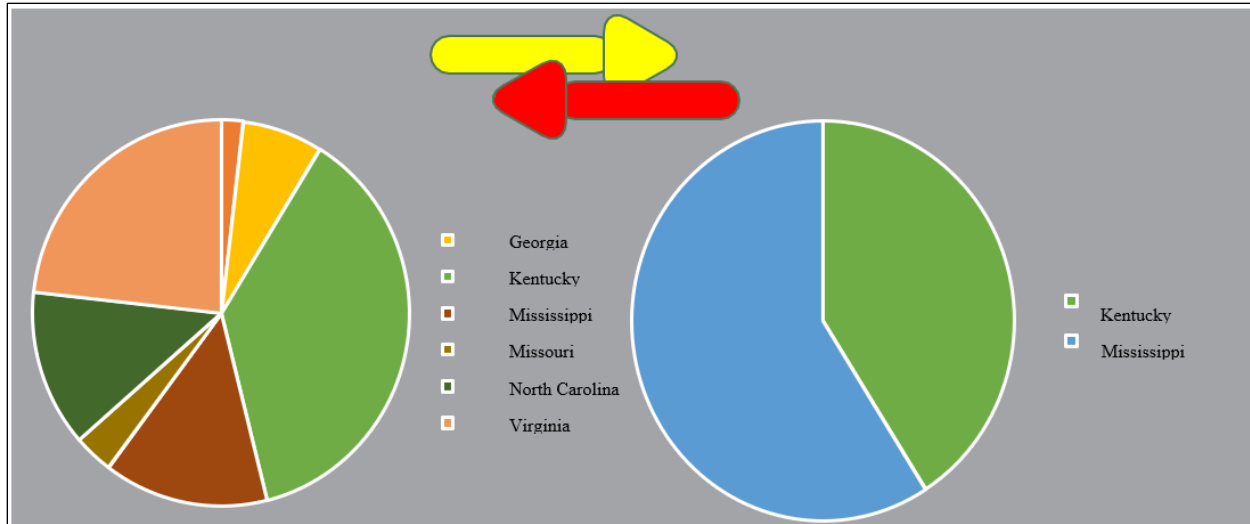


Figure 4.4: Percentage of imported MSW to Tennessee Class I landfills.

Note: MSW was also imported from Alabama, Arkansas, and West Virginia but contributed <1% of the total; therefore, they are not displayed on this graph.

Figure 4.5: Percentage of exported MSW from Tennessee.

Note: In addition to states shown, MSW was exported to Alabama, Georgia, and Virginia but contributed <1% of the total; therefore, they are not displayed on this graph.

Table 4.1: Class I Tennessee Landfills Which Accepted Material (Tons) From Out-of-State

Facility Name	AL	AR	GA	KY	MS	MO	NC	VA	WV
BFI Carter Valley Landfill								8,093	
Bi-County Landfill	21,779								
Bradley County Landfill			43,136						
Cedar Ridge Landfill	1,125								
Chestnut Ridge Landfill								8	
Dyersburg Landfill	97								
ECM of Ridgely Landfill				246		25,295			
Eco Safe Systems Landfill							104,340	197,747	
Iris Glen Landfill							32		974
Madison County Landfill						12			
Meadow Branch Landfill	1,139								
North Shelby Landfill		129			33	5			

Facility Name	AL	AR	GA	KY	MS	MO	NC	VA	WV
Northwest Tennessee Disposal Corp Landfill				123,160		314			
Rhea County Landfill			280						
South Shelby Landfill		828			100,619				
Upper Cumberland Landfill				5,210					
Volunteer Regional Landfill				118,330					
Waste Industries - Lakeway Landfill							11,308		
West Camden Landfill				59					
Total	24,139	957	43,416	247,004	100,652	25,626	115,680	205,848	974
Grand Total									764,296

Class III and Class IV Landfills

In CY22, the amount of material disposed of in Class III landfills was 1,590,964.22 Tons (Table 4.3). Class IV landfills accepted 94,778 Tons of material (Table 4.2). In total, Class III and IV landfills accepted 1,685,742.22 Tons of waste in CY22. This is a 5% increase, up from 1,603,793 Tons in CY21.

Table 4.2: Tonnage Accepted at Class IV Landfills

Landfill Facility Name	Facility Location (County)	Material (Tons)
DOE Y-12 Construction Demolition	Anderson	6,326
Carter County/Elizabethton	Carter	No SWOR Data for 2022
AEDC Demolition	Coffee	1,060
Central Pike	Davidson	No SWOR Data for 2022
Mountain Laurel Environmental Corporation	Greene	18,475
Ft. Campbell Demolition	Montgomery	3,909
Morgan County	Morgan	No SWOR Data for 2022
Chandler Demolition Company, Inc.	Shelby	0

Landfill Facility Name	Facility Location (County)	Material (Tons)
Kingsport Demolition	Sullivan	32,871
Wilson County	Wilson	32,137
Total		94,778

Table 4.3: Tonnage Accepted at Class III Landfills

Landfill Facility Name	Facility Location	Material (Tons)
Alcoa/Maryville/Blount Co. Landfill	Blount	2,871
Claiborne County Landfill	Claiborne	7,105
Cocke County Landfill	Cocke	No SWOR Data for 2022
Southern Services Landfill	Davidson	352,705
Dickson County Demolition Landfill	Dickson	4,394
City Of Newbern Landfill	Dyer	790
City Of Dyersburg Demolition Landfill	Dyer	7,636
Fayette County Environmental Center	Fayette	2,993
Milan City Demolition Landfill	Gibson	No SWOR Data for 2022
Pulaski Demolition Landfill	Giles	112
Greeneville/Greene County Landfill	Greene	14,246
Lakeway Sanitation & Recycling C&D	Hamblen	20
TVA Sequoyah Demolition Landfill	Hamilton	0
Birchwood II LLC Landfill	Hamilton	43,054.65
Haywood County Landfill	Haywood	14,565.98
Paris Henry Co Landfill	Henry	32,294.40
Hickman County Demolition Landfill	Hickman	3,385.97
Humphreys County Landfill	Humphreys	2,080.84
Jefferson County Demolition Landfill	Jefferson	21,308.30
Riverside C&D Landfill, LLC	Knox	97,368.38
Poplar View Landfill	Knox	119,923.70
Lauderdale County Landfill	Lauderdale	No SWOR Data for 2022

Landfill Facility Name	Facility Location	Material (Tons)
Lawrenceburg Demolition Landfill	Lawrence	826
Lewis County Demolition Landfill	Lewis	No SWOR Data for 2022
Evonik Corporation Demolition Landfill	McMinn	No SWOR Data for 2022
McMinn County Landfill	McMinn	No SWOR Data for 2022
Bi-County Solid Waste Management System Landfill	Montgomery	64,265
Bi-County Solid Waste Landfill	Montgomery	180,761
Perry County Demolition Landfill	Perry	No SWOR Data for 2022
Putnam County Demolition Landfill	Putnam	20,167
TVA Watts Bar Nuclear Plant Demolition Landfill	Rhea	0
Sevier Solid Waste Landfill	Sevier	0
Sevier Solid Waste - South Landfill	Sevier	71,039
Blaylock & Brown Construction, Inc. (AKA E-Plex)	Shelby	338,769
North Memphis Landfill, Inc.	Shelby	No SWOR Data for 2022
North Shelby Landfill	Shelby	0
Frayser Business Development Center Demolition Landfill	Shelby	110,600
Smith County Landfill	Smith	8,235
Bristol Landfill	Sullivan	2,725
Tipton County Landfill	Tipton	2,240
White County Landfill	White	9,614
Williamson County Demolition Landfill	Williamson	54,368
Wilson County Demolition Landfill	Wilson	501
Total		1,590,964.22

Section 5: Diversion and Recycling

T.C.A. § 68-211-801 et seq. prioritizes the safe, efficient, and environmentally responsible management of solid waste and recycling. Tennessee measures recycled and diverted MSW from a Class I landfill using the commodity categories listed below. For a summary of materials diverted and recycled see Figure 5.0. Counties are required by T.C.A. § 68-211-871 to submit

annual reports to TDEC providing the amount and type of MSW recycled each calendar year.

1. Metal is a traditionally accepted recyclable that includes aluminum cans, ferrous, non-ferrous, steel cans, and other mixed scrap metal.
2. Fiber is a traditionally accepted recyclable that includes cardboard, magazines, mixed paper, newspaper and inserts, and office paper.
3. Plastic is a traditionally accepted recyclable that includes PET (#1), HDPE (#2), vinyl (#3), LDPE (#4), PP (#5), PS (#6), other (#7), and commingled 1 and 2, 3-7, and other mixed plastic.
4. Glass is a traditionally accepted recyclable that includes containers and packaging (brown/amber, clear/flint, green, mixed), and glass from furniture and electronics. However, glass has been recently less accepted by programs due to a decrease in the glass market.
5. Other recyclables include anti-freeze, used oil, textiles, pallets, tires, latex paint, white goods/ appliances, transmission fluid, cooking oil/grease, and electronics as well as other specialty items. These items vary by program.
6. Single stream recycled items that are collected and not sorted by type.
7. Diversion is how much waste is prevented from entering Class I landfills through source reduction, recycling, reuse, and composting (e.g., prevention through mulching, food waste reduction, etc.)

Section 6: Recovered Materials Processing Facilities

In addition to diversion and recycling, Tennessee was home to 22 identified Recovered Materials Processing Facilities (RMPF) in CY23 (Figure 6.1). T.C.A. § 68-211-802 states that a RMPF is a facility engaged solely in the storage, processing and resale or reuse of recovered materials. Recovered materials are defined as those materials which have been diverted or removed from the solid waste stream for sale, use, reuse or recycling, whether or not requiring subsequent separation processing. Such material is not a solid waste,

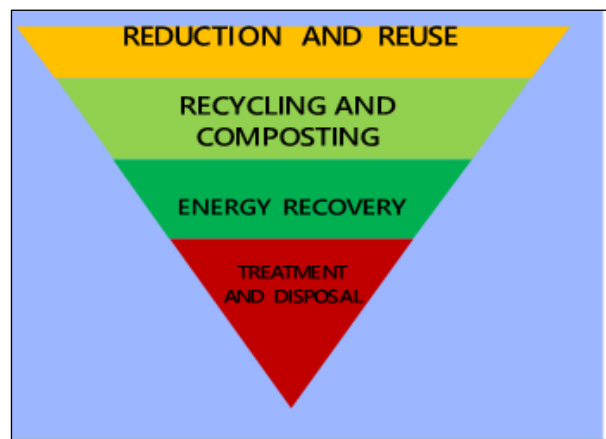


Figure 5.1 – Waste Management Hierarchy- Top layer (gold) Reduction and Reuse, second layer (light green) Recycling and Composting, third layer (dark green) Energy Recovery, and final layer (red) Treatment and Disposal.

thus recovered material processing facilities are not solid waste processing facilities and therefore are not subject to Permit-by-Rule criteria.

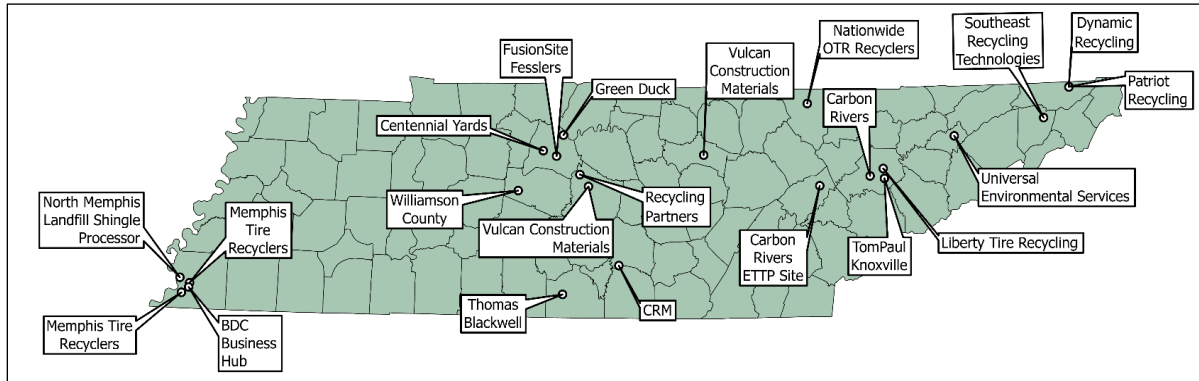


Figure 6.1 - Map of the RMPFs in Tennessee in CY23.

Household Hazardous Waste

To assist in diverting household hazardous waste (HHW) from landfills, TDEC assists counties by hosting HHW mobile events on Saturdays in the spring and fall. When requested by county governments, TDEC staff work with county staff to establish a date, location, and time for the event. These events are free and open for all Tennessee residents. Additionally, for a fee, businesses that are permitted as Very Small Quantity Generators may contact the State’s HHW contractor to set a pickup time for hazardous material at HHW mobile events. Outside of the mobile collection events, there are temporary and permanent HHW locations for citizens to utilize during the year.

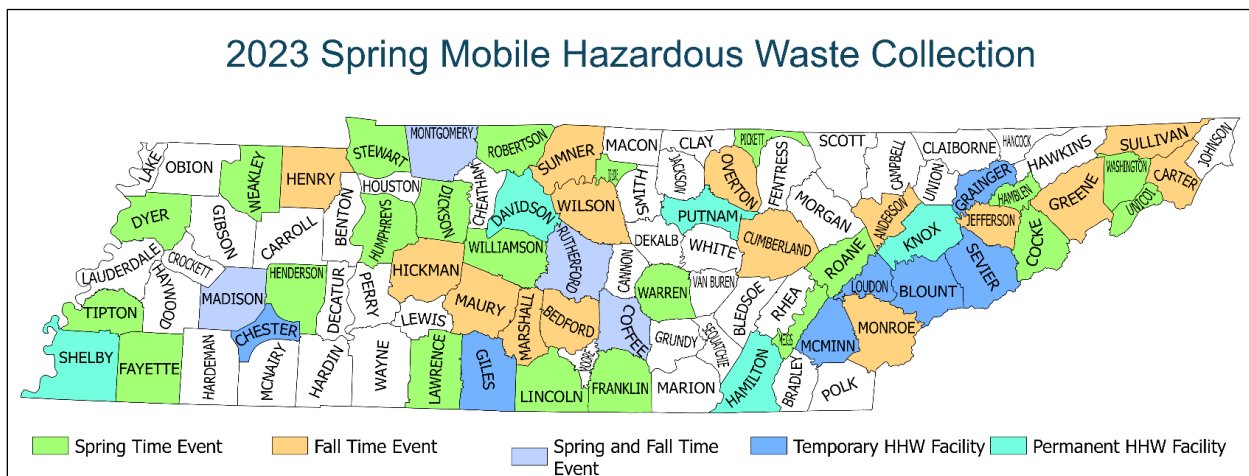


Figure 6.2 - Map showing Household Hazardous Waste (HHW) mobile collection events held in CY23, categorized by season, along with other non-mobile collection points. Each November, the Division of Solid Waste Management (DSWM) Materials Management Program (MMP) contacts counties without permanent or temporary HHW facilities to coordinate mobile collection events. Counties shown in white did not request an HHW mobile event.

Section 7: Materials Management Grants

The following grants were offered in FY23 (July 1, 2022 - June 30, 2023).

Special Projects

Offered to assist with regional solid waste plans and waste characterization studies. Six grants were awarded (see Table 7.0).

Convenience Center

Applicants can use this grant to establish or upgrade convenience centers to provide higher levels of waste and recycling services. Fifteen grants were awarded (see Table 7.1).

Technical Assistance

Supports implementation of the 2025 Plan through funding Development District staff. Staff assist local governments in reaching their program goals or waste reduction and recycling goals. Nine grants were awarded (see Table 7.2).

Recycling Equipment

Applicants may use this grant to purchase equipment needed to establish or upgrade recycling. Eligible recycling equipment includes key recycling equipment needed for collection, processing, operations, or to prepare recovered materials for transport and marketing. Ten grants were awarded (see Table 7.3).

Recycling Rebate

The five most populous counties and their cities that manage solid waste are eligible for the Recycling Rebate. This rebate supports county and city government efforts in waste reduction and recycling (see Table 7.4).

Used Automotive Fluid Recycling

Applicants can use this grant to cover the cost to build or upgrade Automotive Fluid Collection Centers, as well as purchase equipment needed to establish or upgrade Automotive Fluid

Collection Centers (see Table 7.5).

HHW Disposal Assistance

Provides funding assistance to applicants who require assistance to enhance their collection of hazardous household waste at permanent HHW sites in their region. Funds may be used for maintaining and/or operating permanent sites (see Table 7.6).

How are they rated?

Grants are rated based on two categories and four possible modifiers, averaged among ratings completed by a minimum of three raters. Sixty percent (60%) of the application's weight shall be considered based on the proposed project's value, and the remaining forty percent (40%) of the application's weight shall be considered based on the proposed project's feasibility.

Table 7.0: Special Project Grants for FY23

Grantee	County	Project Description	Grant Amount
Greater Nashville Regional Council	Davidson	MM Solid Waste Planning	\$25,000
Interlocal Solid Waste Authority	Franklin	Waste Characterization Study	\$250,000
Memphis & Shelby County Office of Planning	Shelby	Waste Characterization Study	\$250,000
Northwest Tennessee Development District	Gibson	MM Solid Waste Planning	\$20,000
Northwest Tennessee Development District	Dyer	MM Solid Waste Planning	\$20,000
Northwest Tennessee Development District	Crockett	MM Solid Waste Planning	\$20,000
Total			\$585,000

Table 7.1: Convenience Center Grants for FY23

Grantee	County	Project Description	Grant Amount
Hardeman County	Hardeman	Paving at 1 Convenience Center	\$34,200.00
Williamson County	Williamson	2 Compactors, 5 Containers	\$49,292.04
Cumberland County	Cumberland	Fencing	\$18,720.00

Grantee	County	Project Description	Grant Amount
Van Buren County	Van Buren	Fencing, Septic, Water, Electric	\$39,690.00
Marion County	Marion	1 Roll Off Container	\$10,640.00
Hickman County	Hickman	1 Compactor	\$31,500.00
Macon County	Macon	1 Scale	\$50,000.00
Union County Waste Authority	Union	Convenience Center Updates	\$27,044.91
Houston County	Houston	1 Compactor	\$45,000.00
Wayne County	Wayne	1 Concrete Pad, 2 Compactor Boxes, 2 Hoppers	\$50,000.00
Montgomery County	Montgomery	3 Compactors, Paving at 2 convenience centers	\$69,463.53
Hawkins County	Hawkins	5 Attendant Shelters	\$15,904.00
Rhea County	Rhea	1 Compactor, 2 Receiver	\$45,326.70
Grainger County	Grainger	Paving at 1 Convenience Center	\$19,104.00
Haywood County	Haywood	Electricity, Water, Signage, Fencing, Gravel, 2 Attendant Shelters	\$100,000.00
Total			\$605,885.18

Table 7.2: Technical Assistance Grants for FY23

Development District	Grant Amount
Greater Nashville Regional Council	\$109,332
First Tennessee Development District	\$78,550
Northwest Tennessee Development District	\$108,000
Southwest Tennessee Development District	\$89,922
East Tennessee Development District	\$160,888
Mid-south Tennessee Development District	\$40,222
South Central Tennessee Development District	\$148,222

Upper Cumberland Development District	\$160,222
Chattanooga Area Regional Council of Governments	\$104,444
Total	\$999,802

Table 7.3: Recycling Equipment Grants for FY23

Grantee	County	Project Description	Grant Amount
Warren County	Warren	1 Receiver Box	\$23,660.00
Perry County	Perry	3 Containers	\$17,091.00
White County	White	2 Balers	\$23,597.79
Morgan County	Morgan	3 Roll-off Containers, 12 containers	\$32,313.60
Franklin County	Franklin	3 Open Top, 13 Frontload Containers, 1 Recycle Box	\$37,828.20
Henry County	Henry	6 Trailers	\$19,440.00
Chester County	Chester	1 Skid Loader	\$50,000.00
Fentress County	Fentress	1 Skid Loader	\$24,080.00
Clay County	Clay	1 Glass Crusher, 4 Collection Bins	\$20,016.52
Sevier Solid Waste Inc.	Sevier	1 Forklift	\$18,392.00
Total			\$266,419.11

Table 7.4: Recycling Rebates Awarded in FY23

Grantee	County	Grant Amount
City of Memphis	Shelby	\$66,910.00
Metro Government Nashville and Davidson County	Davidson	\$75,806.76
City of Germantown	Shelby	\$4,337.87
City of Knoxville	Knox	\$20,158.63
Hamilton County	Hamilton	\$53,829.00
City of Chattanooga	Hamilton	\$18,100.00

Oak Hill City	Davidson	\$516.91
City of Lakeland	Shelby	\$1,469.46
Total		\$241,128.63

Table 7.5: Automotive Fluid Recycling Grants for FY23

Grantee	County	Project Description	Grant Amount
Cumberland County	Cumberland	2 Heaters, 1 Transfer Pump, 1 Transport Trailer, 1 Canopy	\$74,145.00
Upper Cumberland Regional Airport	White	1 Collection Tank, 1 Heater, 1 Used Oil Filter Crusher, 1 Transfer Pump, 1 Canopy	\$29,395.00
Van Buren County	Van Buren	1 Collection Tank 1 Antifreeze Collection Tank, 1 Transfer Pump, 1 Canopy, 1 Concrete Pad, 1 Used Oil Filter Crusher	\$32,345.00
Sullivan County	Sullivan	1 Transport Trailer	\$20,000.00
Hawkins County	Hawkins	1 Collection Tank, 1 Canopy, 1 Concrete Pad	\$11,750.00
Grainger County	Grainger	1 Heater, 8 Collection Tanks, 1 Canopy	\$52,180.00
Total			\$219,815.00

Table 7.6: HHW Grants for FY23

Grantee	County	Project Description	Grant Amount
City of Chattanooga	Hamilton	HHW Technician	\$30,000
City of Knoxville	Knox	Contracted Pickup/ Disposal	\$30,000
Total			\$60,000

Section 8: Education Programs

The Tire Environmental Act Program provides reimbursement-based financial assistance to organizations for innovative infrastructure, research, or technologies that transform waste tires into useful materials. The grant funding is generated from the five-dollar fee that is added to the purchase of new vehicles. In FY23, TEAP distributed almost \$9.2 million in funds and diverted over 1.4 million tires from landfills.

Get Food Smart TN is a statewide program which engages consumers, restaurants, schools, businesses, and farmers with education outreach, technical assistance, and recognition centered on the prevention, recovery, and diversion of food waste. During the Food Waste Prevention Week (FWPW), OSP partnered with UT Ag Extension Agency and UT Institute of Agriculture to host a statewide food drive at various locations across the state. FWPW in-person events include Bread to Tap events across the state, in Memphis, Nashville, and Chattanooga. These events include chef demos showing how to use food resources wisely and give attendees an opportunity to learn about resources and services from local businesses and organizations around food waste, food donations, and composting.

Unwanted Pharmaceutical Program was in response to emerging concerns from the U.S. Geological Survey and EPA regarding the growing levels of pharmaceutical and personal care products found in many of the nation's drinking water supplies. In CY23, there were 379 pharmaceutical collection bins across Tennessee and 114,045.28 pounds disposed.

Tennessee State Parks "Go Green with Us" program is the first of its kind to set a standard for sustainable practices and recognize the many environmentally conscious procedures that Tennessee State Parks practice. These procedures include energy and water conservation, recycling and waste reduction initiatives, ecosystem health, and erosion control. Each year the parks submit applications to evaluate their Go Green Program and award a level of bronze, silver, gold, or platinum. In CY23, 45 of the 57 state parks reached Platinum status, 9 obtained gold status, and 3 were awarded silver status.

Tennessee Materials Marketplace is an online interactive platform providing a marketplace for collection, donation, and sale of discarded materials from one entity to another. As of September 2022, the national materials marketplace platform has been transitioning to a private start-up called Rheaply. Rheaply has committed to continue working with OSP to provide a free

listing offered for all participants who are not profiting from their materials.

State Facility Recycling Program provides recycling access to employees at state facilities across Tennessee. TDEC provides ‘green cubes’ at each of the eight field offices across the state and the central office. Employees in state offices can recycle mixed office paper, cardboard, and plastic/aluminum beverage containers. TDOT provides recycling for lead tire weights, highway signs, and automotive fluids. Department of Correction provides composting, recycling of cooking oil, and recycling of textiles.

Section 9: Updates to the Statewide Plan

State law requires TDEC to develop and update a State Solid Waste and Materials Management Plan. The last plan update was conducted in 2015, and a newer Statewide Plan will be developed for 2025-2035 with a few reflections on:

- ◆ New challenges facing Solid Waste Management while incorporating new technologies.
- ◆ Revisions to the solid waste reduction and recycling goals.
- ◆ Providing current data to aid local governments with their solid waste plans; and
- ◆ Disaster debris management.

Tennessee School Laboratory Rehabilitation Program (TSLRP)

Provides public Tennessee schools an opportunity to learn about chemical safety practices through an educational experience providing information for the safe disposal of hazardous wastes. Public K-12 schools can schedule an in-person/online educational event to learn more about the chemicals housed in their classrooms and storage areas as well as the importance of maintaining a safe classroom environment by utilizing green chemistry. In addition to an educational component, DSWM pays for a one-time disposal of hazardous material in public schools every five years. By removing hazardous chemicals from schools, it makes Tennessee a safer place to learn.

Small Business Environmental Assistance (SBEAP)

A program within OSP which helps small businesses understand and comply with environmental regulations. It is important to note the following about SBEAP assistance:

- ◆ SBEAP staff are not regulators and do not have regulatory authority. They provide

guidance and technical assistance.

- ◆ Confidential staff serve as liaisons between the regulatory agencies and small businesses.
- ◆ No details about the company working with SBEAP staff are provided to regulators.
- ◆ SBEAP provides training, brochures, webinars, and site visits.

Although most assistance is related to air regulations, staff provide help related to water, solid waste, and land regulations as well.

Section 10: Acknowledgements

The “Annual Report to the Governor and General Assembly” is published by TDEC’s Division of Solid Waste Management. The report is submitted in compliance with T.C.A. § 68-211-873.

The mission of the Division of Solid Waste Management (DSWM) is to protect, improve, and promote health and environmental quality through the responsive, effective oversight of waste management activities and the beneficial use of recovered materials. The Materials Management Program offers excellent customer service through:

- ◆ Technical assistance;
- ◆ Education and outreach programs;
- ◆ APR assistance; and
- ◆ Grant funding to local governments, K-12 schools, and colleges/universities.

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Disclaimer

Great care was taken to ensure the accuracy of this data. Decisions regarding its use or omission were made with the goal of maintaining the integrity of this report. For readability, recycling tonnages and disposal data are rounded to the nearest ton. Due to rounding, some totals may not equal 100%.