

## Description of the existing solid waste management system

Many entities, public and private, have the responsibility for managing solid waste. These include state and local governments, the waste management industry, residents, manufacturers of products, retailers and other businesses, and environmental groups.

An integrated waste management system is an essential component of the infrastructure of a sustainable community. An integrated solid waste system protects public health, supports a vibrant economy, reduces emissions of air pollutants such as greenhouse gases, conserves energy and resources, and produces renewable energy. The solid waste management hierarchy emphasizes source reduction, reuse, recycling, organics recovery, and resource recovery over land disposal.

## Waste generation

Hennepin County has established a zero-waste goal of diverting 90% or more of waste from landfills or incinerators. Minnesota statute requires metro counties achieve a 75% recycling rate by 2030. Although we've made incremental progress, significant changes in waste management systems and individual behaviors will be needed to meet that goal.

About 1.3 million tons of solid waste, which includes recycling, organics, and trash, were generated in Hennepin County in 2023. Of the total tons generated, 43% was managed as recycling and organics. The remaining 57% was managed as trash at a waste-to-energy facility or landfill.



Several waste composition studies have been conducted since the last Solid Waste Management Plan:

- Hennepin County multifamily, 2017
- HERC, 2017
- Minneapolis/Hennepin County, 2022
- HERC, 2022

The county also conducted research on the following:

- Residential food waste reduction, 2021
- Food rescue, 2022
- Reuse and recycling practices at remodeling and renovation projects, 2022-2023

## Collection/hauling

Hennepin County licenses all garbage haulers in the county under Ordinance 17 and as part of the metropolitan area regional licensing program. The county licenses approximately 160 garbage haulers. Recycling and organics haulers are not licensed. Under Ordinance 17, the conditions of the operating license include basics such as vehicle decals, written reports on operations upon request, language regarding cleanup charges, and the right to examine hauler records. Licensing does not currently require performance standards or reporting on waste quantities. Many cities in the county also license haulers.

Residential recycling, organics, and trash service depends on where you live. Cities provide recycling service to most houses and smaller multifamily buildings (those with two to eight units). This service is commonly referred to as single-family, curbside recycling. On the other hand, larger, multi-unit residential buildings have waste services provided by the property owner or manager.

Most cities allow residents to choose their garbage hauler, which is referred to as open collection. Some cities arrange for garbage service by contract or provide their own service, which is referred to as organized collection. Of the county's 44 cities, 20 have organized garbage collection. Only two cities use city employees for collection. The rest contract for service. Residential recycling collection is provided through organized collection in 43 of 44 cities. Only one city, Eden Prairie, has open recycling collection. As of June 2024, 30 cities provided curbside organics recycling. There were 19 cities with organized collection for organics recycling. The remaining 11 cities had open collection but implemented a hauler requirement to make organics service available upon request. Organics drop-off sites were available in 25 cities.

There are no organized collection arrangements for commercial waste, although some cities allow small businesses access to organized collection services. The private sector, municipalities, and the county provide drop-off locations for one or more types of recyclables.

## Facilities

A variety of facilities support an integrated solid waste management system. Most recyclables are taken directly to a Materials Recovery Facility (MRF). Organics are managed by food rescue organizations, food-to-animal-feed operations, and composting sites. After recycling and organics are separated, the remaining waste is hauled to a resource recovery facility or land disposal facility, unless it is first taken to a transfer station and then transported to facilities located farther away.

## Household hazardous waste

Waste that is hazardous as defined by federal and state laws and local ordinances pose environmental and public health and safety risks. Toxicity reduction is an effort to manage the risks associated with the hazardous character of waste. Household hazardous waste (HHW) collection programs play an important role in removing toxic materials from the waste stream. Hennepin County has two drop-off facilities:

- Hennepin County Recycling Center/Transfer Station in Brooklyn Park
- South Hennepin Recycling and Problem Waste Drop-off Center in Bloomington

Of the waste received by HHW facilities, a high percentage is recycled or fuel-blended, or taken from product exchange shelves for reuse. Approximately 10 to 15 percent of the HHW cannot be reused, recycled, or fuel-blended and is managed at hazardous waste incinerators or landfills.

## Recycling

Recyclables collected are taken directly to a recycling market, a recycling broker, or to a Materials Recovery Facility (MRF). Presently, eight MRFs operate in the metro area.

1. Waste Management in Minneapolis
2. Allied in Minneapolis
3. Eureka Recycling in Minneapolis
4. Allied in Inver Grove Heights
5. DemCon in Shakopee
6. Randy's Sanitation in Delano
7. Dick's Sanitation (Recycle Minnesota) in Lakeville
8. Tennis Sanitation in Saint Paul Park

City recycling drop-off sites

- Minnetonka/Hopkins Recycling Drop-off Center
- Maple Grove Recycling Drop-off Center
- Plymouth Recycling Drop-off Center

## Yard waste

Yard waste is prohibited by state law from being mixed with the trash, landfilled, or processed at resource recovery facilities. Yard waste is collected either by garbage haulers using separate collection vehicles, special yard waste collectors (such as lawn services), or by residents who drop off yard waste at collection sites. A few haulers also offer the collection of yard waste mixed with other organics for composting. Yard waste is managed through municipal and private programs. The county does not operate yard waste collection sites.

#### Yard waste drop-off sites

- SKB Malcolm Transfer Station
- Maple Grove Yardwaste Site (privately owned)
- The Mulch Store in Minnetrista
- City of Plymouth Yard Waste Site
- City of Minnetonka Public Works
- St. Louis Park Brush Drop-off Site
- City of Medina Yard Waste Site

## Organics

Organic materials account for the largest portion of waste sent to landfills and resource recovery facilities. Organics recovery programs include food rescue, food-to-animals, and composting. The metro area is currently served by a number of food rescue organizations, food-to-animals operations with garbage feeder permits (able to accept meat and vegetative food scraps), two large scale composting operations that are permitted to accept source separated organics, and several yard waste sites.

Organics Destination	Management	2023 Tons
<b>Specialized Environmental Technologies – Empire</b>	Composting	13,387
<b>Shakopee Mdewakanton Sioux Community</b>	Composting	6,667
<b>Hog farmers, north metro</b>	Food to animals	8,790
<b>ReConserve in Rosemount</b>	Food to animals	11,500
<b>Second Harvest &amp; other food shelves</b>	Food to people	14,389
<b>Total</b>		<b>54,733</b>

## Transfer stations

A transfer station is a facility where solid waste is unloaded from smaller trucks and reloaded into larger vehicles for transport to a final disposal site. Waste transfer stations make solid waste collection more efficient and reduce overall transportation costs, air emissions, energy use, truck traffic, and road wear and tear.

The following transfer stations are located in Hennepin County:

- Republic Flying Cloud
- Brooklyn Park Transfer Station
- WM Maple Grove
- SKB Malcolm / Waste Connections
- Minneapolis South
- Broadway Resource Recovery (Atomic)
- Commercial Container
- Veit

## Resource recovery

In 2023, approximately 380,000 tons of waste generated in Hennepin County were delivered to resource recovery facilities: Hennepin Energy Recovery Center (HERC) and the Ramsey/Washington County Resource Recovery Facility.

Facility	2023 Tons Delivered
<b>HERC</b>	351,030
<b>Ramsey/Washington County Resource Recovery Facility</b>	28,560
<b>Total</b>	<b>379,590</b>

The Hennepin Energy Recovery Center (HERC) facility in Minneapolis uses a mass-burn technology, producing energy for district heating and electricity. The facility also recovers metal from the ash for recycling. HERC is limited by its state permit to burning 365,000 tons annually. Non-processible items and excess waste (waste received that is over the daily processing capacity) from Hennepin facilities are delivered to nearby landfills. The county landfills the ash that remains after processing the waste. Ash from HERC is delivered to the SKB landfill in Rosemount.

The Ramsey/Washington County Resource Recovery Facility (Recycling and Energy Center) is a refuse-derived fuel (RDF) facility owned by Ramsey and Washington counties. The facility was purchased by the two counties in 2016. Mixed waste is sorted into processible and non-processible waste on the tipping floor, processed, and separated into three waste streams: RDF, recyclable metal, and residue. The RDF is transported for combustion to Xcel Energy power plants in Red Wing and Mankato, where it is burned to generate electricity. The facility recovers ferrous and non-ferrous metals for recycling, and unprocessible waste and residue from processing is delivered to landfills. Recycling and Energy Center's permitted capacity is 500,000 tons per year.

## Landfills

There are no landfills operating in Hennepin County. Trash generated in Hennepin County is delivered to either local or out-of-state landfills. In 2023, 51 percent of the trash generated in Hennepin County was land disposed. Seven landfills received trash, with 12 percent going to landfills located out of state. The tables below show which landfills received trash in 2023.

### Municipal solid waste landfilled in Minnesota in 2023

Landfill	Owner	Tons
Elk River	Waste Management	155,103
Pine Bend (Inver Grove Heights)	Republic	116,018
Burnsville	Waste Management	53,265
Spruce Ridge (Glencoe)	Waste Management	9,753
Nobles County (Rushmore)	Nobles County	358

### Municipal solid waste landfilled out-of-state in 2023

Landfill	Owner	Tons
7-Mile Creek (Eau Claire, Wisconsin)	GFL Environmental	25,882
Central Disposal (Lake Mills, Iowa)	Waste Management	11,513
Lake Area Landfill (Sarona, Wisconsin)	Republic	8,001

The metro has two mixed municipal solid waste (MMSW) landfills, both located in Dakota County. The Pine Bend Sanitary Landfill is located in Inver Grove Heights and is owned by Republic. The Burnsville Sanitary Landfill is located in Burnsville and is owned by Waste Management (WM). Two other Minnesota landfills that receive significant amounts of metro area trash are the WM Elk River Landfill in Sherburne County and the WM Spruce Ridge Landfill in McLeod County.

Three out-of-state landfills received trash in 2023: the Advanced Disposal Seven Mile Creek Landfill in Eau Claire, Wisconsin, the Central Disposal Landfill in Lake Mills, Iowa, and the Republic Services Lake Area Landfill in Sarona, Wisconsin.

## Non-MSW management

The metro area is served by nine landfills that accept industrial wastes and/or C&D debris, or non-MSW – none are in Hennepin County. Non-MSW includes nonhazardous industrial waste, C&D waste, materials banned from disposal with trash, problem materials, infectious waste, and other waste streams that are not trash or otherwise defined or regulated as hazardous waste.

Materials separated for recycling at some C&D transfer stations and landfills, include concrete, bituminous asphalt, aluminum, copper, steel, brick, mattresses, appliances, and tires. Other materials have the potential to be separated and recycled from the C&D waste. Private businesses own and operate most of the facilities that manage non-MSW. There is some public sector activity in managing certain non-MSW materials, such as tree waste processing and crushing, and recycling concrete or road base material.

## Hazardous waste

All businesses located in Hennepin County that produce hazardous waste must be licensed. All hazardous waste generators must comply with basic management requirements that provide for the safe handling and proper disposal of all hazardous waste. Additional requirements apply to certain generator size categories, which are determined by the quantity of waste generated. The larger the generator, the more extensive the requirements. To ensure compliance, hazardous waste generators are subject to unannounced inspections. Generators may face fines or court appearances if they are not in compliance with the hazardous waste rules.

**Disposal companies.** The county provides a [hazardous waste disposal companies fact sheet \(PDF\)](#) lists businesses in the Twin Cities that dispose of hazardous waste. This list of business hazardous waste disposal companies is provided for information purposes only. This list does not constitute approval of any of the firms identified nor do we claim that the list is complete.

**VSQG collection programs.** Very Small Quantity Generators (VSQGs) are allowed to deliver their own waste in their own vehicle to a licensed VSQG collection program. Small businesses, non-profits and other organizations that generate 220 pounds or less of hazardous waste per month are also eligible to participate in this program. Although program participants pay disposal charges, the programs are intended to provide convenient and cost-effective disposal options. This allows eligible participants to regularly dispose of small quantities of waste rather than accumulate it over a long time period. For more information on the requirements, list of collection programs and how to manage and store your waste see the [VSQG collection programs fact sheet \(PDF\)](#).

The county plans to explore its role in supporting VSQG programs for hazardous waste.

# County System

## Drop-off Facilities

Hennepin County has two drop-off facilities where residents can get rid of recycling, electronics, appliances and household hazardous wastes. The facilities accept a wide range of materials and have convenient hours. The primary purpose of the facilities is to accept household hazardous waste (HHW) and problems materials and, in the case of Brooklyn Park, to serve as a transfer station for trash and organics. The facilities also accept recyclables.



### Brooklyn Park

#### Brooklyn Park Transfer Station and Recycling Center

Full and self service areas

8100 Jefferson Highway  
Brooklyn Park, 55445



### Bloomington

#### South Hennepin Recycling and Problem Waste Drop-off Center

Full service only

1400 W 96th St.  
Bloomington, 55431

In general, the county does not accept waste from businesses, but an exception is made for cardboard, scrap metal, recycling, and organics recycling from small businesses. Both facilities have reusable paint, automotive products, cleaners, adhesives and other products available for free.

The county charges a fee for some items, including \$3 for each tire, \$25 per mattress or box spring, \$15 for each appliance, and \$10 for each TV, computer monitor, or laptop. Limits may also apply for some items.

To allow for broader participation, the county has reciprocal use agreements with other metro counties to allow residents to deliver household hazardous waste and problem materials to facilities and

collection events in any of the participating counties. The county of origin reimburses the receiving county for the cost of managing the waste.

### Facility Hours

Day	Hours
Tuesday to Saturday	9 a.m. – 5 p.m.
Sundays and Mondays	Closed
Holidays	Closed most major holidays

## Household hazardous waste and problem materials

Household hazardous waste and problem materials collection programs play an important role in protecting public health. Many of the materials managed by these programs are banned from municipal solid waste. Although there are various private options for disposing of these wastes, the drop-off facilities provide a convenient one-stop location. These facilities accept a wide range of materials including electronics, paint, appliances, vehicle wastes (oil, batteries, antifreeze and tires), household batteries, fluorescent lamps and products that contain ignitable, reactive, corrosive or toxic chemicals.

To provide more convenient local disposal options, the county also offers collection events at various sites throughout the county. Additionally, the county operates and promotes medicine drop boxes available throughout the county.

## Recycling

The drop-off facilities accept common recyclables, such as single sort recycling and cardboard, from homeowners and businesses that self-haul their materials. The county also supports the collection of non-traditional recyclables by offering recycling options for many items that are accepted in recycling carts at home.

Non-traditional recyclables accepted

- Mattresses and box springs
- Plastic bags and film
- Scrap metal
- Media (CDs, DVDs, etc.)

## Organics

Hennepin County also offers a reduced tipping fee of \$35 per ton for organics delivered to the county's Brooklyn Park Transfer Station (BPTS). With a tipping fee for garbage of \$74 per ton at BPTS and HERC, there is an incentive to save money by managing organics separately from garbage. Brooklyn Park Transfer Station accepts organics for free from residents and small businesses. Organics must be generated in Hennepin County and be separated from trash and recyclables. There is a limit of 5 bags per person per day.

## Resource Recovery – HERC

Despite the focus on diverting materials from the trash through waste reduction, reuse, recycling, and organics recycling, residents and businesses put over 742,000 tons of stuff in the trash in 2023. This is nearly 1,150 pounds per person. State statute requires counties to manage waste according to the state's waste management hierarchy, which prioritizes waste processing and waste-to-energy methods over landfilling.

The Hennepin Energy Recovery Center (HERC) facility in Minneapolis uses a mass-burn technology. HERC is limited by its state permit to burning 365,000 tons annually. The county negotiates waste delivery agreements with haulers to deliver trash directly to HERC or to the county's Brooklyn Park Transfer Station, which is used to facilitate the delivery of trash to HERC.

HERC produces enough electricity to power 25,000 homes. The electricity is sold. A portion of the steam produced is extracted to provide heating and cooling to the downtown Minneapolis district energy system and Target Field.

The combustion process reduces the volume of waste by 90 percent. The material remaining after combustion is non-hazardous ash. The ash is screened to recycle metals and then sent to a landfill. HERC recovers more than 11,000 tons of scrap metal each year, which is more than double the amount of metal collected in curbside recycling programs in the county.

Air emissions at HERC are cleaned and treated before being released. HERC's air permit requires it to operate under stringent U.S. EPA and State of Minnesota air pollution regulations. The air emissions are also well below the European Union standards for waste-to-energy facilities.

HERC uses the following state-of-the-art air emission control technology:

- Air is injected into the boiler to control nitrogen oxide (NO<sub>x</sub>) emissions.
- Activated carbon is injected to control mercury and other metals.
- Flue gases pass through a scrubber, where a lime slurry is injected to control sulfur dioxide and hydrochloric acid. Combustion gases pass through fabric filters to remove particulate matter, metals and dioxins

## Proposal for future use of facilities

In January 2024, the county developed a plan to reinvent the county's solid waste system to accelerate closure and repurposing of the HERC. This plan establishes a zero-waste dashboard to define the criteria to be met to responsibly close HERC and identifies policies that need to be adopted by the Minnesota State Legislature to realize this zero-waste future.

As decisions and progress toward zero waste are made and details are better known, a comprehensive plan for the repurposing of the HERC site will be developed.

The county's report on Reinventing the Solid Waste System provides an overview of the key operational steps that would need to be completed to stop incinerating trash at HERC at any point in time. In

addition, the report includes a section on determining the future of the Brooklyn Park Transfer Station site.

## Anaerobic Digestion

The county is not moving forward with an anaerobic digestion facility because many market conditions have shifted – inflation, capital costs to build, supply chain disruptions, and operating costs – and made the project not financially viable. The local landscape for organics processing has changed significantly. We now have composting sites expanding their capacity and other public and private entities are developing AD facilities with greater capacity than what the county’s site could manage.

Infrastructure investments are still needed to accelerate progress toward zero waste. Even though the county is not proceeding with the AD facility, we are exploring multiple infrastructure options that will position the county toward our zero waste goals. This work will require the county and state to invest in more infrastructure. The county is shifting focus to a recycling recovery facility to pull reusables, recyclables, and organics from the trash prior to disposal. This type of facility, when paired with existing recycling programs, has the greatest potential to increase recycling rates.

## Recycling Recovery Facility

In March 2024, the Board adopted a resolution to establish a capital project for costs associated with the predevelopment of a reuse and recycling recovery facility with direction to estimate additional project costs, including the construction costs of the facility. The project is not at a point where the county can provide an operational budget or revenue projections.

The county’s plan to reinvent the solid waste system outlines the approach to aggressively pursue zero-waste policies, programming, and infrastructure and advocate for policy changes at the state level to move toward zero waste and make meaningful progress toward reducing climate emissions. The plan laid out the 12 highest priority zero-waste actions, including recovering recyclable and organic materials from the trash stream by developing a recycling recovery facility.

A reuse and recycling recovery facility has the highest diversion potential of all the actions identified in the county’s Zero Waste Plan. These types of facilities use a variety of technologies to sort cardboard, metal, some plastics, and organic materials from the trash for recycling. There is still trash to dispose of at the end of the process, but with the paper and organic materials removed, the climate impacts of disposal are reduced.

Recycling programs where participants sort items from the trash, called source separation, will continue to be prioritized as the best way to manage recyclables. Source separation provides the highest quality materials with the least contamination at the lowest cost. A reuse and recycling recovery facility complements, not replaces, programs focused on increasing source separation. Leading zero-waste cities and counties have incorporated post-collection processing into their efforts to take trash diversion programs to the next level.

The county recently completed a comprehensive study to better define the needs for a reuse and recycling recovery facility designed to process 330,000 to 360,000 tons of trash, or approximately half the trash produced in the county today.

Because of Hennepin County's geographic size, it is anticipated that there should be several reuse and recycling recovery facilities in the county. One viable site option is the Hennepin County-owned property adjacent to the Brooklyn Park transfer station. This is an excellent location and makes operational sense by providing efficiencies and reducing emissions from transporting waste. The zoning on this property includes priority for solid waste infrastructure.

Since the county has decided to not move forward with the anaerobic digestion facility, the county will seek to repurpose the \$26 million appropriation from the 2023 Minnesota Legislative Session (HF670) for a Brooklyn Park reuse and recycling recovery facility. To be eligible for bonding funds, a project must be established in the 2024 Hennepin County Capital Budget. The county will also seek additional state bonding funds.

## County Licensing of Haulers and Facilities

The county licenses all garbage haulers in the county under Ordinance 17 and as part of the metropolitan area regional licensing program. Recycling haulers are not licensed. Under Ordinance 17, the conditions of the operating license include basics such as vehicle decals, written reports on operations upon request, language regarding cleanup charges and the right to examine hauler records. Licensing does not currently require performance standards or reporting on waste quantities. Some municipalities in the county also license haulers.

Under the authority of Ordinance 2, the county licenses solid waste facilities. The purpose is to establish standards for disposal of solid waste within the county. Recycling facilities are not included.

The county ordinances related to solid waste management are more fully described in a separate document, along with city ordinances related to solid waste.

# County Rates and Charges

## Commercial Hauler Fees

### HERC

- Contract tip fee: \$74 per ton (as of January 1, 2024)
- Tip fee gate rate: \$105 per ton

### Brooklyn Park Transfer Station

- Source separated organics: \$35 per ton

## Citizen Fees and Charges

### Brooklyn Park Transfer Station

- Tires: \$3 each
- TVs, computer monitors, laptops: \$10 each
- Appliances: \$15 each
- Mattresses and box springs: \$25 per piece

## Rates for Hennepin County Ordinances

### Ordinance #15 – Solid Waste Management Fee

- Residential rate: 15.5%
- Commercial rate: 21.5%

### Ordinance #18 – County Collected Solid Waste Fee for Solid Waste Management Services

- Currently set at zero

More information is available in the county's Solid Waste System Operating Manual.

# Hennepin County Solid Waste Division Budget

The Solid Waste Division budget includes the following facilities and programs:

- Hennepin Energy Recovery Center (HERC)
- Brooklyn Park Transfer Station and Recycling Center
- South Hennepin Recycling and Problem Waste Drop-off Center
- Waste Reduction and Recycling
- Household Hazardous Waste and Problem Materials

2023 budget actuals

- Revenue: \$75.5m
- Expenditures: \$68.3m

More information about these facilities and programs can be found in the county's annual Recycling Progress Report at [www.hennepin.us/solidwastepanning](http://www.hennepin.us/solidwastepanning). Additional detail about the budget can be found in the county's report on HERC and its role in the solid waste system, pages 32-38.

## Revenue

The primary sources of revenue for the county's solid waste programs are included below.

- Ordinance 15 hauler collected solid waste management fees
- Trash tipping fees
- Sale of energy and recovered materials from HERC
- State grants – SCORE and LRDG

## Expenditures

The primary sources of expenditures for the county's solid waste programs are included below.

- Operation of HERC
- Operation of the Brooklyn Park Transfer Station and South Hennepin facilities
- Waste reduction and recycling programs
- Household hazardous waste and problem materials programs