

# RE/NEWS

Tips and resources for smart residential recycling, composting, waste disposal, and keeping our water clean



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## Back to School! Huzzah!

*Keep your waste wits about you this special fall season*

Here's hoping that this school year is a whole lot different than last year. Kiddos will be filling classrooms, packing their desks with Trapper Keepers and love notes, trading lunches, and fighting over who gets to sit by who on the bus. The halls will be bustling with squeaky sneakers and shuffling papers.

Some of us have converted to devout online supply shoppers; others still like the thrill of a good Target run. Either way, you can find ways to make this post-pandemic (fingers crossed) school year a little easier on the environment.

Chances are, you're going to be working from a supply list. If you're up for it, check in with your child's teacher before you buy. My kindergarteners had 3 bottles of Elmer's glue on their supply list last year. After spending a few minutes envisioning my daughter chugging the glue straight and my son rubbing it in his hair...I messaged the teacher. "3 bottles of glue? For kindergarten? Really?". Her response, "Oh

no. We don't use glue. I don't know why that's on the list." Right, okay. No glue. Maybe there are other things that have just been left on for nostalgia or even an oversight.

Second step. Shop your house. Do you have anything left over from last year or from rejected craft projects that never quite got finished? Gather them up! Clear out last year's home school desks if you haven't already. Raid the junk drawer. Collect what you have and cross any matches off your shopping list.

Now it's time to shop. Whether you're shopping in store or online, only get what you need. You should also look for products with as little packaging as possible. Ask for online items to be shipped in one box instead of several small packages, and choose items that are made with recycled content whenever possible.

A few simple steps can put a fresh, green coat on your school shopping. •

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### Questions?

Visit [wlssd.com](http://wlssd.com) or call  
the Hotline at 218.722.0761



## The Scoop on Compost Supply

*We got you in 2022*

To make sure bulk and bagged Garden Green® compost is available for sale in spring—our busiest season, we won't be making compost available for sale in fall of 2021.

Creating compost is a long game because the process itself takes nine months of careful tending. We begin with food scraps delivered to WLSSD's Organics Composting Facility from grocery stores and restaurants, mixed with yard debris and branches from residents and landscape companies.

There's no rushing greatness.

The compost mix is "made fresh daily" with whatever food scraps are delivered, so naturally the COVID-19 pandemic impacted WLSSD's compost site operations when restaurants dialed back production. Our residential food scrap drop sites saw increases in usage during the pandemic, but the increased volume from households wasn't nearly enough to overcome the reduction from the commercial sector. We began to see the reduction in finished compost about a year after the start of wide-spread restaurant shutdowns. Although we quickly tweaked our compost recipes to

incorporate more leaves to offset the dearth of food, the process still requires the juicy, nitrogen-rich food scraps.

Another factor impacting the site are the routes run by large national retailers. In the past, WLSSD received food scraps from a chain with stores across northern Minnesota. They now have a new food scrap collection contractor with new routes that don't always end in Duluth!

Lastly, in a big win for the Earth but maybe not so much local gardens, our composting compatriots in Wisconsin have expanded in recent years, adding capacity to compost cheese curds aplenty. Some food processors in northern Wisconsin have been able to divert their scraps to closer Wisconsin facilities rather than WLSSD, saving fuel, emissions, and money. It's an overall great thing, but highlights the volatility in local "waste sheds," or how waste is moved and managed across regions.

So hold tight, dear garden amenders, we'll have literal TONS of compost ready for you—in spring of '22! •

## FALL TO-DO LIST



After the leaves have fallen, mow them several times and rake into piles to lightly mulch your gardens for the winter.



Want to raise monarch butterflies? Fall is the best time to plant milkweed seeds! The seeds need to go through a 'cold season' to trigger germination.

Remember to empty and store the rain barrel. Then clear any remaining leaves out of the gutters before the snow flies.



Make a waste-busting fall road trip kit for your car: include a travel mug, a set of silverware, reusable napkins, and a reusable straw if you use them. Don't forget a small bag for gathering recyclables.



*Bring reusables along for the ride. Having alternatives handy makes it easy to say "no thanks" to single-use items in the drive-thru or convenience store.*

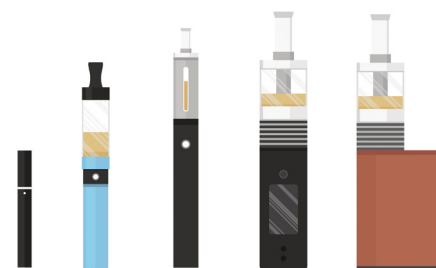
# Clearing the Air on E-Cig Disposal

Many of us have heard about the health impacts of vaping and the soaring use of e-cigs, but there is less information about properly disposing of these devices. Both the battery and the liquid nicotine product—"vape juice"—are hazardous to human health and the environment if not properly disposed.

Let's break this down. There are countless brands and types of e-cigs and vapes. However, most all of them contain rechargeable batteries and liquid nicotine. The batteries heat liquid nicotine and turn it into vapor that is inhaled. These batteries pose a significant fire hazard if thrown away in the garbage. Many vaporizers require the user to depress a button to activate the internal heating element, and devices can get as hot as 600°F. It does not take long to start a fire if pressure or other items in the trash accidentally depress the button. Vaporizer batteries are no different from other rechargeable

batteries. They contain heavy metals that can leach into water sources if not properly recycled.

Nicotine "juice" that is improperly handled can pose a risk of accidental poisonings. "E-juice" or "vape juice" is the fluid used in vaporizers and electronic cigarettes that creates the actual vapor. Flavor is just one of the ingredients in e-liquid. Vape juices usually include nicotine and many other additives and chemicals. Even the heating coil, which allows the liquid to become an inhalable aerosol, releases new chemical substances and trace metals that go into the user's lungs (John's Hopkins Medicine, 2021). Nicotine is actually a PESTICIDE! It is especially hazardous when ingested. Often, vape juice is concentrated and contains very high levels of nicotine—sometimes equivalent to several packs of cigarettes in a small container. It could be fatal if a small child swallowed



flavored nicotine juice believing it was candy or food.

Vaping has become widespread and government agencies have responded quickly to keep up. As health and other agencies grapple with the issue, dispose of all vape-related products at a household hazardous waste facility to be sure the components are properly and safely handled. In our community, WLSSD's Household Hazardous Waste (HHW) Facility is easy to use. Area residents can dispose of vape-related and other hazardous materials like paints, stains, and household chemicals FREE of charge in our drive-through HHW facility. We recycle or properly dispose of these materials to keep our community safe. •

## RECYCLE YOUR FOOD SCRAPS

- Keep a container near the kitchen sink.
- Line the container with a compostable bag (available for free at most drop sites) with the Biodegradable Products Institute logo.
- Fill with food scraps—from prep, plate scraping, fridge clean-out....
- Drop full bags off at a Food Scrap Drop Site.



Check out  
new sites!

### FOOD SCRAP DROP SITES

#### YARD WASTE COMPOST SITE

27th Ave W & the Waterfront  
*Free bags available from staff*

#### MATERIALS RECOVERY CENTER

Rice Lake & Ridgeview Roads  
*Free bags available from staff*

#### HOUSEHOLD HAZARDOUS WASTE FACILITY

27th Ave W & the Waterfront  
*Free bags available from staff*

*WLSSD Locations available during regular facility hours. Check [wlssd.com](http://wlssd.com) for hours.*

#### CHESTER CREEK CAFÉ

1902 E. 8th St.  
*Free bags inside café*

#### WILLARD MUNGER INN

7408 Grand Ave.  
*Free bags available from staff*



#### CONCORDIA LUTHERAN CHURCH

2501 Woodland Avenue  
*Free bags inside church office during open hours*



#### YMCA @ ESSENTIA WELLNESS CENTER

4289 Ugstad Road, Hermantown  
*Free bags at Member Services desk*

#### LAKE SUPERIOR COLLEGE

W-building parking lot at  
2101 Trinity Rd.

*Free compostable bags also available at WLSSD's Administrative Office, 2626 Courtland Street, Duluth*



# Q&A



*Have a question?*

Email your question to  
**re-news@wlssd.com** or  
**contact us** at **wlssd.com**

## Q. What do I do with ropes, cables & old extension cords?

*Tame the tangles with these hot tips*

A. Extension cords can be recycled with other electrical cords and holiday light strands at the Materials Recovery Center for free. For all the other stuff—long ropes and leaky hoses—cut them up and put them in the trash can. When these ‘tangles’ are loose in the garbage, they get knotted around parts of the heavy equipment at transfer stations and landfills; this can shut down operations until an operator cuts them off.

Cut long ropes, cables, and hoses into 10-foot sections or coil and tie them so they cannot unravel and cause problems farther down the line. Then, toss them in the trash.

WLSSD recently added “High-Tensile Cable or Rope” to the Solid Waste Ordinance as an Unacceptable Material in the trash. Cable and rope are ‘unacceptable’ when they are in lengths longer than 10 feet and greater than 3/8” diameter. Coaxial cable also fails the test when it is longer than 10 feet and not wound and secured. Waste haulers will be on the look-out and let their customers know how they need to prepare these ‘tangles’ for proper disposal, but it doesn’t hurt for residents to be in on the super star trash tips, too! •



## 4 TIPS FOR BETTER RECYCLING



- 1 Flatten as many of your containers as possible to save space and make transporting recyclables more efficient.
- 2 Rinse containers and remove caps from glass bottles.
- 3 Don’t put plastic bags in your household recycling bin. Use paper bags to collect recycling since the bag can be recycled with other paper.
- 4 Shop wisely. Buy reusable, returnable and recyclable items. Buy items made from recycled material.

## NO CURBSIDE RECYCLING?



Look for recycling information in your town or city newsletter or at [wlssd.com](http://wlssd.com). You’ll find convenient recycling drop-off centers near you.

CANOSA	GRAND LAKE	NORTH STAR
DULUTH	LAKEWOOD	RICE LAKE
FREDENBERG	MIDWAY	SOLWAY

Bring these items to a recycling drop-off center.

- **PLASTIC** (household bottles, tubs, jugs, jars and lids)
- **GLASS** (food and beverage bottles and jars)
- **METAL** (food and beverage cans)
- **NEWSPAPERS AND MAGAZINES** (including glossy inserts)
- **OFFICE PAPER** (letter, copier, notebook and computer paper)
- **BOXBOARD AND PASTEBOARD** (cereal, soda and pasta boxes)
- **CORRUGATED CARDBOARD** (clean, free of oil and food)





WESTERN LAKE SUPERIOR SANITARY DISTRICT

# FACILITY HOURS

*For holiday hours or questions,*

Visit [wlssd.com](http://wlssd.com) or call

the WLSSD Hotline at 218.722.0761

## Materials Recovery Center

Corner of Rice Lake &  
Ridgeview Roads

Mixed waste ..... \$22/cu yd  
Microwaves ..... 1 free per day, \$5 each add'l  
Appliances ..... \$5 each  
Tires\* ..... 4 free per day, \$3 each add'l  
Household Electronics ..... \$15, 12, 9, 2 or **FREE**  
Recyclables, fluorescent bulbs, metal .... **FREE**  
**FULL LISTING AT WLSSD.COM**

\*other prices apply for larger commercial & off-road tires

### YEAR-ROUND

Tuesday	9am - 4pm
Wednesday	9am - 4pm
Thursday	9am - 4pm
Friday	9am - 4pm
Saturday	9am - 4pm
Sunday, Monday	Closed

## Household Hazardous Waste Facility

27th Ave West & Courtland Street

Paint products ..... **FREE**  
Button batteries ..... **FREE**  
Used oil and filters ..... **FREE**  
Chemicals and pesticides ..... **FREE**  
Fluorescent bulbs ..... **FREE**

### YEAR-ROUND

Thursday	9am - 4pm
Friday	9am - 4pm
Saturday	9am - 4pm
Sunday - Wednesday	Closed

## Yard Waste Compost Site

27th Ave West & Courtland Street

Grass, leaves, garden debris ..... **FREE**  
Brush and branches ..... \$10/cu yd  
Dirt and sod (3 cu yd limit) ..... \$8/cu yd

Garden Green® compost also available for purchase

### MID-APRIL THROUGH MID-NOVEMBER

Friday	9am - 4pm
Saturday	9am - 4pm
Sunday	9am - 4pm
Monday - Thursday	Closed

Residential prices are listed. Non-residential customers call 218.722.3336 for pricing.

## CARLTON CO. FACILITIES

### HOUSEHOLD HAZARDOUS WASTE FACILITY

1950 Hwy 210, Carlton

Household hazardous waste accepted at  
no charge from residents.

Open May 4 - October 9, 2021

Tuesday 8:30 am - 3 pm

Saturday 8:30 am - 1 pm



### TRANSFER STATION

1950 Hwy 210, Carlton

Solid/demolition waste, appliances, electronics, tires and  
brush accepted for a fee from Carlton Co. residents.

**Construction and demolition waste accepted  
Wednesdays only; mixed waste not accepted on  
Wednesdays.**

Summer hours - April 1 to October 31

Monday - Friday 8:30 am - 4 pm

Saturday 8:30 am - 1 pm

For rural recycling shed locations and hours, visit  
[co.carlton.mn.us/254/Recycling-in-Carlton-County](http://co.carlton.mn.us/254/Recycling-in-Carlton-County)

## PARTY TIME!



Our social calendars are  
speckled with autumn fun like  
costume parties and bonfires.  
But you know what's not fun?  
Gross bags of greasy garbage  
piled up after the party is over.

Want to go for a fresh look  
instead? Try your hand at  
hosting a Waste-Free Event.

Rent dishes and glassware  
instead of stocking up on  
polystyrene foam plates and  
Solo® red cups.

Purchase your own set of  
reusables (handy for the next  
round of holiday hosting). If the  
real stuff isn't in the budget,  
opt for compostable serveware.  
Plates, cups and utensils made  
from paper or starch-based

materials are available to meet  
all your feasting needs. Stock  
up at area bulk sale locations,  
paper goods distributors, or  
even the internet. Just make  
sure your supplies are sporting  
the "BPI-Certified" seal of  
approval.

WLSSD provides bins and bags  
for collecting all your food  
waste and compostables at no  
charge! Give us a shout a few  
weeks prior to your event by  
emailing [info@wlssd.com](mailto:info@wlssd.com) to  
reserve your Event Kit. We'll  
walk you through any supplies  
you might need and what to do  
when your event is over. •

# Green with Algae

## *Mercury removal tech trials*

WLSSD has focused its pollution prevention programs to address several pollutants of concern. However, mercury has been a high priority of WLSSD's pollution prevention program since 1989, following reports of high levels in fish in the St. Louis River. We've made a lot of progress toward preventing mercury from ending up in our dirty water and trash in the past 30 years, including the amount of mercury present in the cleaned-up effluent we return to the St. Louis River each day. Learn more about our nationally-recognized pollution prevention programs at [wlssd.com](http://wlssd.com).

Like all water dischargers, WLSSD has a permit that limits the amount of mercury contained in the clean water we return to the St. Louis River; we have been challenged over the years to meet one of the nation's most stringent mercury limits. We currently have a variance that allows an interim limit



*Clear tubes of pollutant-chomping algae filled the greenhouse.*



*A greenhouse was set up at WLSSD to experiment with the algae-based ABNR system.*

as we seek solutions. It's a challenge we've embraced—mercury can have harmful effects on the people and wildlife that depend on the water resources we serve to protect.

WLSSD has studied dozens of potential mercury reduction technologies, and even tested some of the technologies on site—to no avail. In 2020, WLSSD partnered with a company called Clearas to experiment with their technology in a way never before studied. Could their algae-based system, known as **Advanced Biological Nutrient Recovery** (ABNR), remove the elusive last bit of mercury remaining after our treatment process?

The Clearas ABNR system was set up in a greenhouse structure at WLSSD designed to provide the algae everything it needed for optimal growth—sunlight and wastewater that contains nutrients like nitrogen and phosphorus. As the algae grows, it

consumes nutrients, removing them from the wastewater. The algae can be harvested and repurposed by a company that converts it into products like plastics and foam.

Our groundbreaking study found the algae also slurped up mercury, reducing the “total mercury” content in the wastewater by 84%! In theory, this technology would help us reduce mercury levels below the looming permit limits, but it has never been implemented in a context like ours.

Our next step is to team up with Clearas and a consulting firm to examine feasibility and viability for a large scale system (35 million gallons a day) at WLSSD, to include cost, infrastructure, and site integration. While ultimately it may not be possible to implement, WLSSD is pleased to continue our research contributions toward mercury elimination in wastewater. •



# RE/NEWS



Recycled paper made with 10% post-consumer waste,  
processed chlorine-free

A newsletter about solid waste and wastewater treatment within the Western Lake Superior Sanitary District, published for residents of the WLSSD service area. Comments and questions are welcome at [re-news@wlssd.com](mailto:re-news@wlssd.com) or 218.722.3336. WLSSD provides award-winning wastewater treatment and solid waste management for a 530-square-mile service area in St. Louis and Carlton counties.

#### **WESTERN LAKE SUPERIOR SANITARY DISTRICT**

2626 Courtland Street  
Duluth, MN 55806-1894  
218.722.3336  
[wlssd.com](http://wlssd.com)