

SUSTAINABILITY NEWS

Chemistry Department | University of Michigan



SOLID WASTE AUDIT

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Students in *ENVIRON 391* recently conducted a waste audit in Chemistry! Find out more below.

HURON RIVER CLEANUP RECAP

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The Huron River Cleanup was a massive success! Over 5000 pieces of trash were collected!

FREEZER CHALLENGE

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Nine labs participated and a total of 38.7 kWh/day of electricity savings were made!

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Learn more about our Sustainability Advocate and Sustainable Lab of the Month.

SOLID WASTE AUDIT

Over the course of the Winter Semester, a group of students enrolled in *ENVIRON 391: Sustainability & the Campus* performed a waste audit of the hazardous solid waste produced in the Sanford, McNeil, and Pratt Labs. Questions that they set out to answer include the following:

- In what ways can we reduce the waste produced by the chemistry department?
- Can we identify novel opportunities to reduce waste streams generated by the chemistry department?
- How do we promote the search and implementation of waste reduction techniques in the chemistry department?









Here's what they found:

- ~10% of items can be diverted through disposal in a different receptacle (such as uncontaminated aluminum foil and needle wrappers).
- ~23% of the items can be diverted through re-use (such as glass vials).

Did You Know These Are Divertible??

The students produced the following graphic in order to remind us on how to be more mindful on where our waste is going. Thanks to the team for all their work on the project! The Office of Campus Sustainability and Kacey will be taking over the project and using the results to help develop educational programming regarding solid waste disposal.

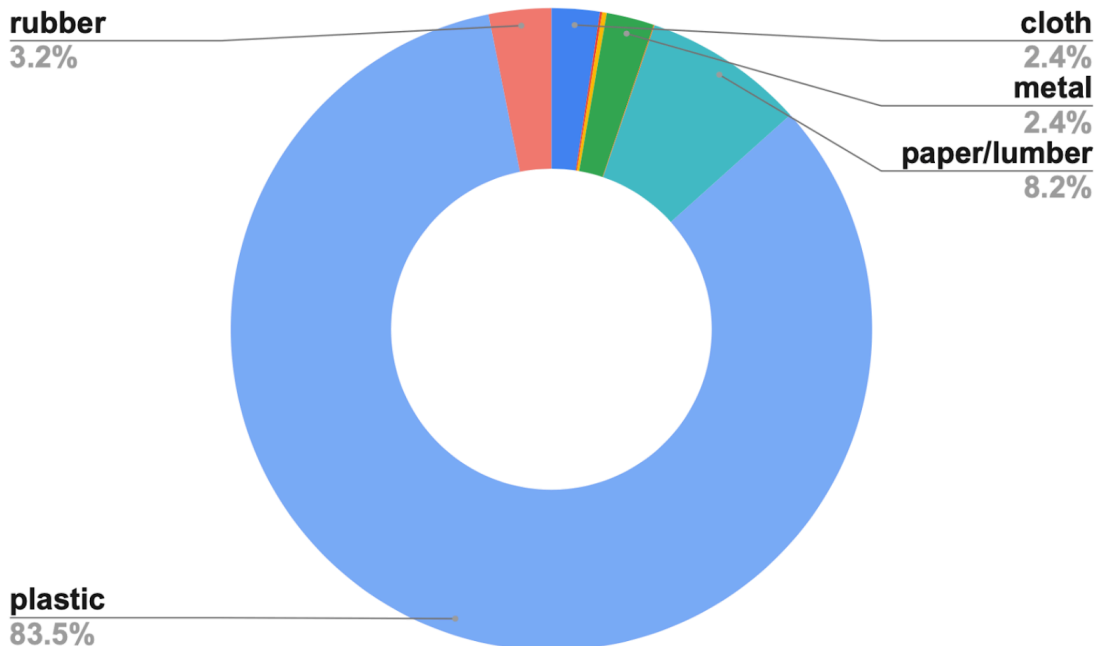
Divertible!		Non-Divertible *When in doubt throw it out!*	
			
Bubble Wrap	Sterile Plastic Wrappers & Syringe Wrappers	Electrical Tape	Kimwipes
+ Parafilm Backing		+ Single use items + Chemicals and chemical byproducts	
Reusable		<p>Based on a preliminary audit of the hazardous waste containers from the Sanford, Pratt, and McNeil research groups, common objects that could be diverted from solid hazardous waste to trash or recycling have been identified. Some items can be diverted by making quick changes to how experiments are conducted. Items can also be diverted when planning the experiment. (e.g. purchasing syringes that are not individually wrapped). Other items can be reused after washing away the hazardous material with the proper solvents. By diverting non-hazardous material from the waste containers, the mass of material the Chemistry Department has to send to be incinerated will decrease.</p>	
			
Glass Vials & Lids	Centrifuge Tubes & Lids		

HURON RIVER CLEANUP RECAP

On May 3rd, in efforts to make positive impacts on our local ecosystem, we held our ninth annual Huron River Cleanup. We had **9 teams of volunteers** head out to various schools in the Ann Arbor Public Schools system and their neighboring parks. Some quick stats and fun facts for you:

- Over **5800 pieces of trash and recycling** were collected.
- Of all trash and recycling, **plastic items** were the most commonly collected, representing **83.5%** of all collected items. A good reminder to reduce your plastic use and recycle responsibly!
- For the first time, we had three students from the Chemistry Club at Pioneer High School join us!

A more detailed breakdown of the collected trash can be found in the pie chart below! A big shoutout to Rahul Jha and Emily Nolan for spearheading the organization for this event, and a big thanks to the Chemistry Department for sponsoring the supplies and shirts for this year. Watch out for an email about the next cleanup, scheduled on **September 6!**



FREEZER CHALLENGE RECAP

Ten labs (McNeil, Bartlett, Sanford, McCrory, Schultz, Maldonado, Keane, Ault, Marsh) participated in the department's second annual Freezer Challenge through MyGreenLab. As a result, a total of **38.7 kWh/day** of savings were made, which is approximately equivalent to **65.2 lbs of CO2 emissions/day**, or equal to 75.3 miles driven by an average gasoline powered vehicle.

Participating lab members will be treated to an ice cream party! Here are the details:

- **August 4, 2pm**
- **Atrium!**

To participate in the challenge next year follow these steps:

- Complete an inventory of cold storage.
- Perform preventative maintenance (can include a dethaw).
- Retire and/or upgrade to energy-efficient models.

For more information on how to decommission old cold storage units, visit the following link:
<https://ocs.umich.edu/programs/workplace-initiatives/freezer-challenge/>.

DID YOU KNOW?

Participants in the 2025 Freezer Challenge saved a combined **38.7 kWh/day!**

38.7 kWh/day is equivalent to
75.3 miles driven



by an average gasoline-powered vehicle.

Source: UESPA Greenhouse Gas Calculator; My Green Lab



SUSTAINABILITY SHOUTOUTS

STUDENT OF THE MONTH

Thrift Event Organizer

Sabrina Reich



Earlier this year, in collaboration with CGSC, the Sustainability Committee hosted its inaugural UM Chemistry Pop-Up Thrift Event! This event could not have been seen to completion without the leadership and initiative of Sabrina. Thanks to her organization, we were **able to redistribute over 170 articles of clothing to members of the Michigan community and raise over \$375 for the Friends of the Detroit River**, a local nonprofit dedicated to restoring and rehabilitating the Detroit River, as well as raising awareness about marine conservation broadly speaking. Thank you to Sabrina for making this all happen! And thank you to committee members Emily and Ila for your contributions in also helping organize and staff the event. Due to its resounding success, we are looking forward to hosting the next UM Chemistry Pop-Up Thrift Event in Spring 2026!

LABS OF THE MONTH

Lab Oven Timers
Sanford & McNeil Labs



The Sanford and McNeil Labs have started piloting lab timers over the past few semesters! Lab timers can be used to turn off miscellaneous lab equipment, such as ovens, overnight to save on power and decrease the carbon footprint of the laboratory environment. So far, even in early stages of implementation, putting lab timers on just ovens used to heat glass equipment **can save labs over \$100 per year and reduce the CO₂ emissions of any given lab by at least one megaton**. Thanks to Bobby and Allison for all of their work in implementing lab timers in the Sanford and McNeil Labs!

DID YOU KNOW?

Quinn vanZile, undergraduate in the McNeil Lab, is currently taking charge in expanding the use of lab timers to other labs! She is currently piloting use in other synthetic organic labs, including the Nagorny, Montgomery, and Wolfe Labs. If you're also interested in piloting lab timers on various equipment in your lab space, **reach out to us at the following email:**
chem.sus.info@umich.edu

ONGOING CAMPAIGNS

>>> HARD PLASTIC RECYCLING

Does your lab generate lots of hard plastic waste, such as pipette tips, tubes, well plates, or filter units? The Office of Campus Sustainability is interested in figuring out if labs would recycle hard plastic waste if waste containers for such plastics became free through the university. **If this sounds interesting and applicable to you, let us know at chem.sus.info@umich.edu.**

>>> COMPOSTING

Some fun new composting initiatives are coming to life in our department!

- The Sanford and McNeil Labs are piloting compost bins for paper towels that have only been used to dry your hands.
- Additionally, we are piloting mini kitchen compost bins that can be emptied regularly into the compost bins that can be found in the hallways.



Interested in having these in your own lab? Reach out to Anne directly at ajmcneil@umich.edu.

>>> MISSING/BROKEN SIGNS

Notice any missing or broken signs on any of the landfill, recycling, or compost bins? If so, please fill out the following form to let the Office of Campus Sustainability know, and they will come replace them!

https://docs.google.com/forms/d/e/1FAIpQLSfol7uiBSXyAptJ9_G04qLy4yrHxQKG B7YAY3Ejb0ROpuTD1g/viewform