940-898-4001 ext. 3 (general) or ext. 5 (emergencies)
Risk@twu.edu



Lab Safety!

May/June 2022 Newsletter

Hazardous Waste

On February 3, 2022, Texas adopted the EPA's generator improvement rules. This meant changes to how TWU handles hazardous and regulated waste. EH&S handles most changes, but there are several that impact lab users. EH&S has created a new Hazardous Waste training on Bridge detailing pertinent changes. The training is only about 30 minutes long.

To summarize:

- Lab users must list all the chemicals that will be in the container and their approximate percentages (a range is also acceptable)
- Lab users must notate the hazards associated with the chemical/s on the label
 - Hazards must be denoted as soon as the first drop is placed in the waste bottle
- If aqueous and corrosive, the pH must be tested and put on the label

As a friendly reminder, waste containers should be in the following condition:

- Clean
 - Free of residues, etc.
- Closed
 - Keep containers tightly closed unless doing so creates a higher hazard (e.g. aqua regia); if containers can't be kept tightly closed, secure them with a vented cap
 - For containers with missing lids, transfer waste to another container that can be closed
- Labeled
 - The New hazardous waste labels are available from EH&S (see image below)

HAZARDOUS/REGULATED WASTE		
Waste ID:	Dept:	Contact:
Accum. Start Date:		
Contents: (no formulas)		
		%
		%
		%
		%
Hazards: (check all hazards that apply)		
☐ Flammable ☐ Toxic ☐ Corrosive (pH) ☐ Reactive ☐ Oxidizer ☐ H2O Reactive ☐ Air Reactive ☐ Other		

If your lab has hazardous waste ready for pickup, reach out to EH&S in a timely manner. Please avoid only scheduling pickups when there are over half a dozen waste containers; requesting pickups in a timely manner makes for less clutter in your lab and an easier time for EH&S staff! Waste pickups can be scheduled easily online.

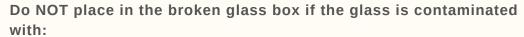
If you have questions regarding the new hazardous waste procedures, please contact EH&S!

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Broken Laboratory Glass

Cuts are one common cause of injuries in academic labs. Never pick up broken glass by hand; always use a broom and dustpan or tongs. Once you have the broken glass up, what do you do with it?

If it is not contaminated, go ahead and place it in the rigid, cardboard broken glass box (see photo to the right). Broken glass boxes should be present in each lab. Departments are responsible for ordering broken glass boxes. Once full, it should be taped closed and a glass trash pickup request can be submitted.



- Biohazards
 - Broken glass with biohazardous contamination should be put in a sharps container
- Radioactive material
 - Contact EH&S
- Chemicals (dry or liquid)
 - Chemicals must be picked up as waste- submit a <u>hazardous</u> waste <u>pickup request</u>
 - Residues are acceptable if not acutely toxic
 - If acutely toxic, contact EH&S

If you aren't sure what to do with it, contact EH&S!

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Unbroken Laboratory Glassware

Do you have lab glassware that you want to get rid of? Unbroken lab glassware (e.g. flasks) may be subject to regulatory restrictions and can't be just given away or discarded. That is because some types of glassware (such as Erlenmeyer flasks and round bottom flasks) are considered "regulated laboratory apparatus" per Texas state law. Contact EH&S if you wish to dispose of unbroken lab glassware; EH&S can provide guidance on if it can be discarded OR can come to pick up the glassware for disposal.

Certain things like unbroken glass culture plates contaminated with biohazards (not sharp) must be autoclaved and then can be reused or placed into the regular trash

• Be sure to follow Treated Medical Waste procedures

So what about empty chemical containers? If you wish to keep it for waste, AND the chemical was not acutely toxic, you can rinse the container (be sure to collect the rinsate as hazardous waste) and use it with a compatible chemical waste.

If you don't wish to keep the container, then unbroken, empty glass reagent containers can be discarded in the trash if:

- Chemical was not acutely toxic
- Rinsed, with rinsate collected as hazardous waste
- The label is defaced with "Empty" written on it



Pioneers Recognized For Safety Excellence!

Juan Carvajal de Luna is a TWU alum who graduated with his BS in Biochemistry in 2018 & MS in Chemistry in 2021. He began working in the Chemistry department as a Laboratory Services Supervisor in January



of 2022. Despite being in his new role just a short time, Juan has made significant changes to the Chemistry department and labs to help make the teaching labs safer. Juan has spearheaded lab cleanup efforts to get rid of copious amounts of hazardous waste and old, unused chemicals. He has also worked to update BioRAFT's chemical inventory for Chemistry and assist with training tracking. In addition, he worked with EH&S to set up the new, hands-on lab safety training for Chemistry TA's. These are just a few of the many ways Juan works to help make Chemistry labs safer! Thank You. Juan!



Is there someone at TWU you feel should be recognized for their commitment to safety? Complete this form!

Pioneer Prepared!



If there is ever a medical emergency do you know how to respond?

Minor medical emergencies (like a cut), might only require first aid, and reporting the incident to your supervisor & EH&S.

• If blood was involved, certain requirements may need to be followed under the bloodborne pathogens plan; EH&S can provide guidance.

Major medical emergencies (like someone passing out unexpectedly) are obviously quite serious. Call 911 immediately & follow dispatcher guidance. STAY CALM & stay with the individual until first responders arrive. Render first aid/CPR only if trained and comfortable doing so. Do not attempt to move the person unless there is danger of further

If you still have questions, contact EH&S!

Safety Story

In 2019 on the TWU Denton campus, an EH&S staff member responded to a bromine spill where a large glass desiccator had broken.

Bromine, which is corrosive, had melted the floor wax. The floor wax then hardened back around the broken glass desiccator piece, "gluing" it to the floor.

During an attempt to remove the thick, heavy piece of broken glass, the EH&S staff member cut their hand. Luckily, it was only a minor injury!

Remember, <u>report</u> all injuries to EH&S!

Event Reminders

- EH&S Snacks & Conversation: Come by to chat about your safety questions! FREE doughnuts!
 - SRC 321
 - Tuesday, June 14th
 - **1:30-2:30 pm**

Whooo's that from EH&S?





Drew Townsend is TWU's Director of **Environmental** Health & Safety and **Radiation Safety** Officer (RSO).

Drew has been with TWU since 2016. As a very hands-on Director, don't be surprised if you see Drew at lab inspections and out and about on campus! His approach to safety is having EH&S serve as a helpful resource, NOT as 'the safety police'.

In his free time, Drew loves to get outdoors, mountain bike and camp!