Waste Disposal Procedures

Texas A&M University – Commerce
Fall 2014

Who is responsible for chemical waste disposal in the lab where you work?

If you make the waste, you are responsible for properly identifying and tagging it for disposal!

When is waste collected?

- Typically there will be a waste collection scheduled for January, May/June and perhaps August/September if necessary.

How will we know exactly when it will be collected?

An e-mail will be sent out to all faculty with the deadline for when waste packaging should be completed and where the waste should be taken.

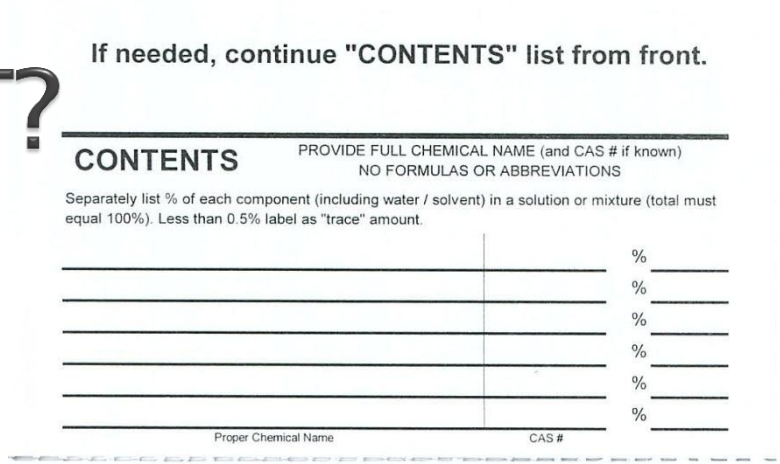
When do these new waste disposal procedures begin?

LAST WEEK

SO HOW DO I START?

1. Read the back of a waste label.

2. You read the **entire** back of a waste label.

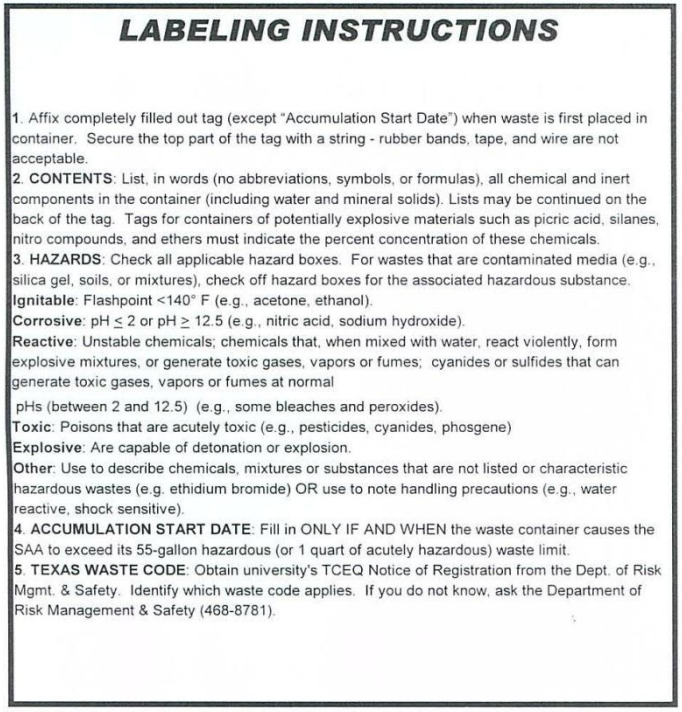


If needed, continue "CONTENTS" list from front.

CONTENTS PROVIDE FULL CHEMICAL NAME (and CAS # if known) NO FORMULAS OR ABBREVIATIONS

Separately list % of each component (including water / solvent) in a solution or mixture (total must equal 100%). Less than 0.5% label as "trace" amount.

Proper Chemical Name	CAS #	%
		%
		%
		%
		%
		%
		%



LABELING INSTRUCTIONS

1. Affix completely filled out tag (except "Accumulation Start Date") when waste is first placed in container. Secure the top part of the tag with a string - rubber bands, tape, and wire are not acceptable.
2. **CONTENTS**: List, in words (no abbreviations, symbols, or formulas), all chemical and inert components in the container (including water and mineral solids). Lists may be continued on the back of the tag. Tags for containers of potentially explosive materials such as picric acid, silanes, nitro compounds, and ethers must indicate the percent concentration of these chemicals.
3. **HAZARDS**: Check all applicable hazard boxes. For wastes that are contaminated media (e.g., silica gel, soils, or mixtures), check off hazard boxes for the associated hazardous substance.

Ignitable: Flashpoint <140° F (e.g., acetone, ethanol).
Corrosive: pH $\leq$ 2 or pH $\geq$ 12.5 (e.g., nitric acid, sodium hydroxide).
Reactive: Unstable chemicals; chemicals that, when mixed with water, react violently, form explosive mixtures, or generate toxic gases, vapors or fumes; cyanides or sulfides that can generate toxic gases, vapors or fumes at normal pHs (between 2 and 12.5) (e.g., some bleaches and peroxides).
Toxic: Poisons that are acutely toxic (e.g., pesticides, cyanides, phosgene)
Explosive: Are capable of detonation or explosion.
Other: Use to describe chemicals, mixtures or substances that are not listed or characteristic hazardous wastes (e.g. ethidium bromide) OR use to note handling precautions (e.g., water reactive, shock sensitive).

4. **ACCUMULATION START DATE**: Fill in ONLY IF AND WHEN the waste container causes the SAA to exceed its 55-gallon hazardous (or 1 quart of acutely hazardous) waste limit.
5. **TEXAS WASTE CODE**: Obtain university's TCEQ Notice of Registration from the Dept. of Risk Mgmt. & Safety. Identify which waste code applies. If you do not know, ask the Department of Risk Management & Safety (468-8781).

COMPLIANCE REMINDERS

- If reusing a container for waste, remove or deface old labels.
- Containers must be in good condition.
- Containers must be compatible with the wastes.
- Containers must always be closed, except to add or remove waste.
- Each container must be placed in a "Satellite Accumulation Area" near the point that the waste was generated until sent for disposal.
- Each individual container must be tagged or labeled.

Back side of a waste label (tag)

- **CONTENTS:** List, in words (no abbreviations, symbols, or formulas), all chemicals and inert compounds in the container (including water and mineral solids). Lists may be continued on the back of the tag. Tags for containers of potentially explosive materials such as picric acid, silanes, nitro compounds, and ethers must indicate the percent concentration of these chemicals.
- **HAZARDS:** Check all applicable hazard boxes. For wastes that are contaminated media (e.g., silica gel, solids, or mixtures), check off hazard boxes for the associated hazardous substances.
- **IGNITABLE:** Flashpoint <140 F (e.g., acetone, ethanol)

Label Back Cont'd

- **CORROSIVE:** pH $\leq$ 2 or pH $\geq$12.5 (e.g. nitric acid, sodium hydroxide).
- **REACTIVE:** Unstable chemicals; chemicals that, when mixed with water, react violently, form explosive mixtures, or generate toxic gases, vapors or fumes; cyanides or sulfides that can generate toxic gases, vapors or fumes at normal pH (between 2 and 12.5) (e.g., some bleaches and peroxides).

Label Back Cont'd

- **TOXIC**: Poisons that are acutely toxic (e.g., pesticides, cyanides, phosgene).
- **EXPLOSIVE**: Are capable of detonation or explosion.
- **OTHER**: Use to describe chemicals, mixtures or substances that are not listed or characteristic hazardous wastes (e.g. ethidium bromide) OR use to not e handling precautions (e.g., water reactive, shock sensitive.

Label Back Cont'd

- **ACCUMULATION START DATE:** Fill in ONLY IF AND WHEN the waste container causes the SAA to exceed its 55-gallon hazardous (or 1 quart of acutely hazardous) waste limit. You probably won't have to deal with this.
- **TEXAS WASTE CODE:** Don't worry about this part, the waste hauler will fill in the waste codes.

COMPLIANCE REMINDERS

- If reusing a container for waste, remove or deface (completely mark out) old labels.
- Containers must be in good condition
- Containers must be compatible with the waste.
- Containers must ***always*** be closed except to add or remove waste.
- Each container must be placed in a "Satellite Accumulation Area" near the point where the waste was generated until sent for disposal.
- Each individual container must be tagged or labeled.

Back side of a waste label (top)

If needed, continue "CONTENTS" list from front.

CONTENTS

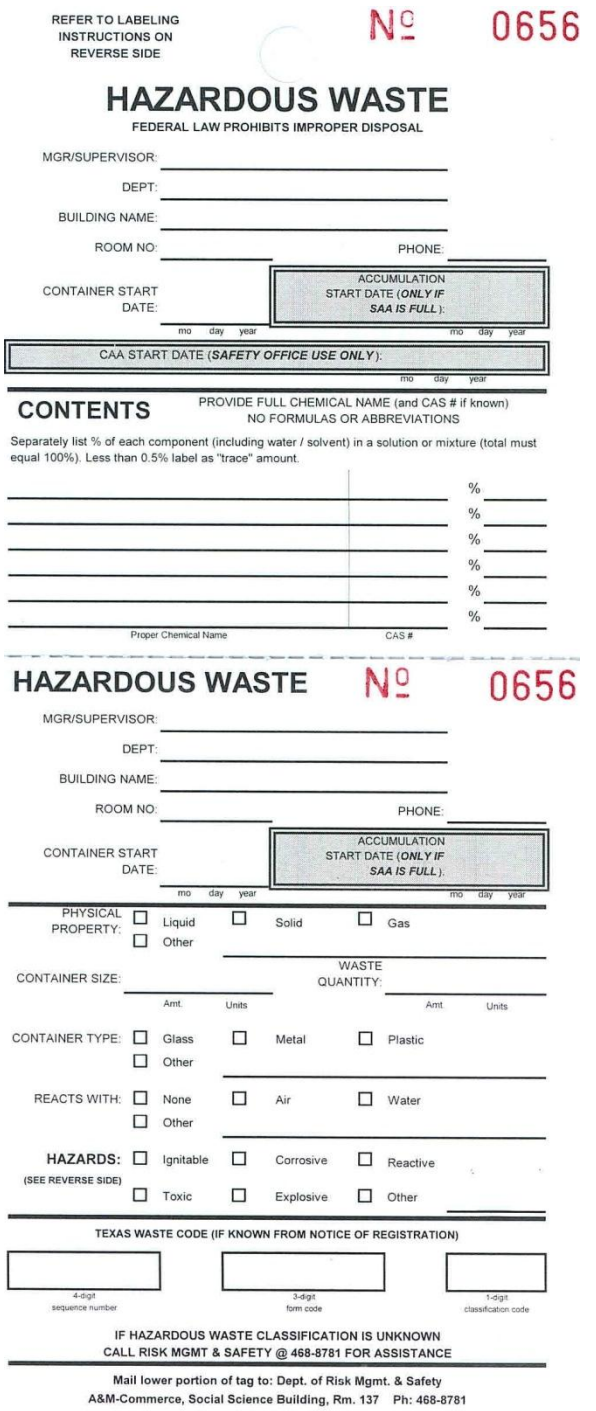
PROVIDE FULL CHEMICAL NAME (and CAS # if known)
NO FORMULAS OR ABBREVIATIONS

Separately list % of each component (including water / solvent) in a solution or mixture (total must equal 100%). Less than 0.5% label as "trace" amount.

Proper Chemical Name	CAS #	%
		%
		%
		%
		%
		%
		%

SO NOW WHAT DO I DO?

- Now that you have read the entire back of a waste label (tag)
- Fill out the waste tag. (Do not take off the bottom part until the bottle is filled)



REFER TO LABELING INSTRUCTIONS ON REVERSE SIDE

№ 0656

HAZARDOUS WASTE

FEDERAL LAW PROHIBITS IMPROPER DISPOSAL

MGR/SUPERVISOR:

DEPT:

BUILDING NAME:

ROOM NO: PHONE:

CONTAINER START DATE: mo day year

ACCUMULATION START DATE (*ONLY IF SAA IS FULL*): mo day year

CAA START DATE (*SAFETY OFFICE USE ONLY*): mo day year

CONTENTS

PROVIDE FULL CHEMICAL NAME (and CAS # if known)
NO FORMULAS OR ABBREVIATIONS

Separately list % of each component (including water / solvent) in a solution or mixture (total must equal 100%). Less than 0.5% label as "trace" amount.

% %
% %
% %
% %

Proper Chemical Name CAS #

HAZARDOUS WASTE № 0656

MGR/SUPERVISOR:

DEPT:

BUILDING NAME:

ROOM NO: PHONE:

CONTAINER START DATE: mo day year

ACCUMULATION START DATE (*ONLY IF SAA IS FULL*): mo day year

PHYSICAL PROPERTY: ☐ Liquid ☐ Solid ☐ Gas ☐ Other

CONTAINER SIZE: Amt. Units

WASTE QUANTITY: Amt. Units

CONTAINER TYPE: ☐ Glass ☐ Metal ☐ Plastic ☐ Other

REACTS WITH: ☐ None ☐ Air ☐ Water ☐ Other

HAZARDS: (SEE REVERSE SIDE) ☐ Ignitable ☐ Corrosive ☐ Reactive ☐ Toxic ☐ Explosive ☐ Other

TEXAS WASTE CODE (IF KNOWN FROM NOTICE OF REGISTRATION)

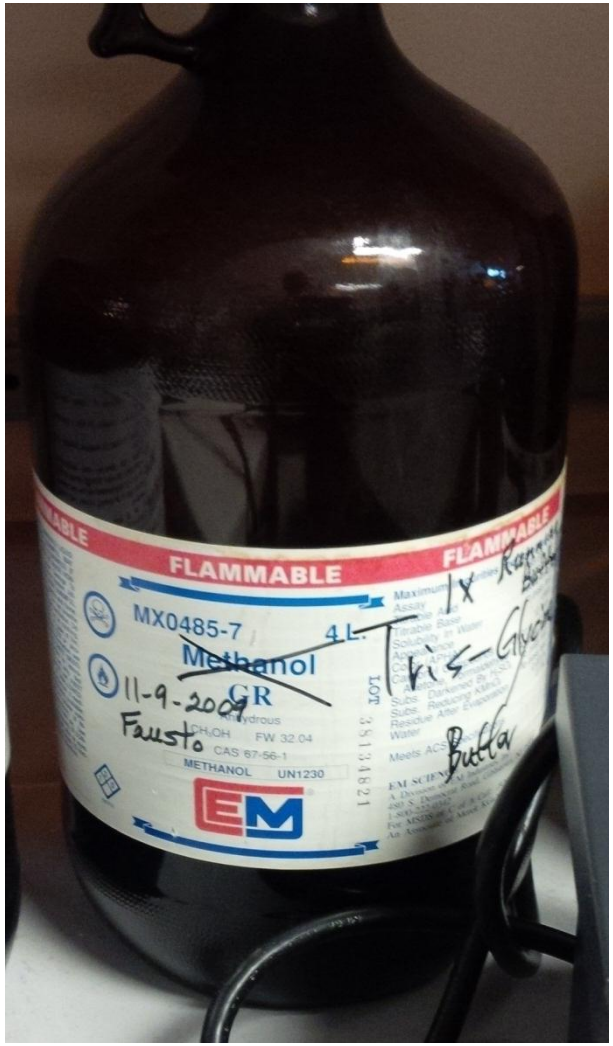
4-digit sequence number | 3-digit form code | 1-digit classification code

IF HAZARDOUS WASTE CLASSIFICATION IS UNKNOWN
CALL RISK MGMT & SAFETY @ 468-8781 FOR ASSISTANCE

Mail lower portion of tag to: Dept. of Risk Mgmt. & Safety
A&M-Commerce, Social Science Building, Rm. 137 Ph: 468-8781

Waste bottles, etc…

- When you are going to use a waste bottle take the manufacturers label off or mark it COMPLETELY out.
- Tag the bottle by **TYING** a waste label to the bottle. (Do not take off the bottom part of the label until the bottle is full and all contents are written on the label)



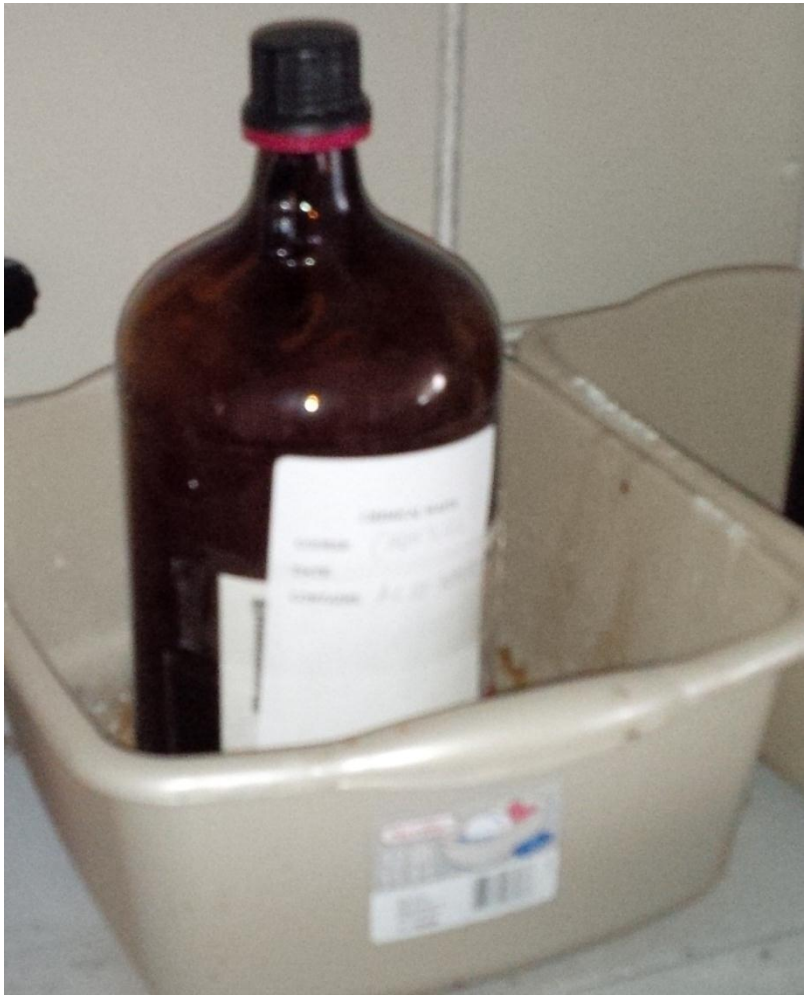
This is not acceptable

Waste bottles, etc…

This is better **and** worse

The label is covered with a new clean waste label and notice the secondary containment (good for you)

But… no tag



Once you put a waste bottle into use?

Once the bottle is tagged and put into use add it to your waste disposal spreadsheet which will be e-mailed to you

CHEMICAL WASTE SPREADSHEET **DATES: _____ TO ____**

WASTE TAG #	PROF.	DEPT	BLDG	ROOM #	PHONE #	ACCUM. START DATE	CONTENTS	CAS #	% CONTENT	CONTINER SIZE	% FULL	HAZARDS OR REACTIVITY

READ THE BACK OF THE WASTE LABEL CAREFULLY

When a waste bottle is put into service, it should be free of any manufacturer labels. A waste tag should be created and strung to the bottle.

Add the tag number to this spread sheet and enter the information as/when the bottle is being filled.

CONTENTS: Provide full chemical name (& CAS# if known) No formulas or abbreviations

Separately list % of each component (including water/solvent) in a solution or mixture (total must equal 100%). Less than 0.5% label as "trace" amount.

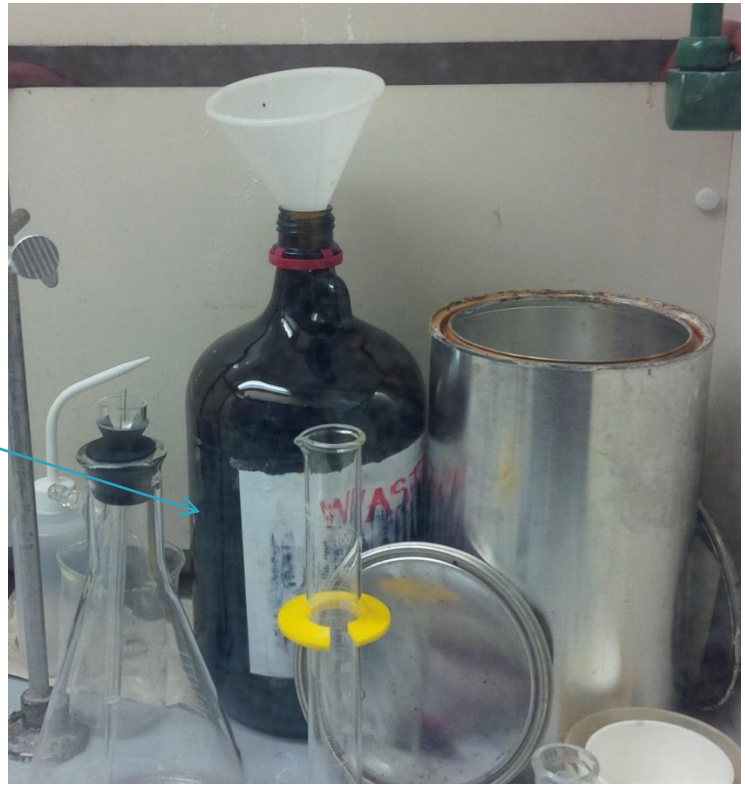
NOTE: You may add as many lines as necessary within this spreadsheet.

PROF. = MANAGER or SUPERVISOR: This should be your research instructor and the lab coordinator for the teaching labs.

Where do I take the waste after I tag it?

Each room has a temporary storage area (satellite) where the waste is to be stored until the disposal company arrives.

IT IS NOT INSIDE THE HOOD as you see here, especially with a label that only says "waste" and uncapped with a funnel in it.



Unacceptable

Where do I take the waste after I tag it?

- These storage areas may be from secondary containers such as in the organic research lab to areas that have simply been taped off specifically for waste containers to be stored.

It may look ugly and dirty (it really needs to be cleaned up a bit) but it is acceptable for waste containment

What about after it is full?

- Once the waste container is full **AND CAPPED,** the tag is completed, and all the information is entered into the spread sheet, place the bottle back in the temporary storage area until the disposal company SET Environmental comes to pick them up.

When SET arrives, what do I do?

- You will be apprised of when SET will arrive.
- You should take your waste from your temporary storage area to room 307 unless informed otherwise.

THIS PROCEDURE SHOULD START TODAY
INSPECTIONS WILL BEGIN SOON