## **Guidance Document**

## **Workplace Chemical Inventory**



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## **Workplace Chemical Inventory**

#### **PURPOSE**

To comply with the hazardous chemical reporting requirements of the Texas Community Right-to-Know Acts (TCRAs) and Sections 302, 311, and 312 of the Federal Emergency Planning and Community Right-to-Know Act (EPCRA), The University of Texas at Austin is required to submit a chemical inventory for each calendar year (January 1 - December 31). This report serves as an inventory of hazardous chemicals for The University of Texas at Austin's Main Campus, J.J. Pickle Research Campus, Marine Science Institute and all other locations. The inventory assists local fire departments, as well as other emergency response personnel, in planning for emergencies at our facilities. This inventory is one of the reasons for the departmental requirement to submit a copy of your Workplace Chemical Inventory to our office by January 31 of each year, as described in The University's written Hazard Communication Program.

#### **SCOPE**

# <u>Research Laboratories</u> (not storerooms, etc.) are <u>exempt</u> from these instructions if all the following conditions are met:

- The chemicals are under the direct supervision or guidance of a technically qualified individual,
- Labels on incoming containers are not removed or defaced,
- The University maintains an SDS on the chemicals,
- Laboratory employees are trained in accordance with the written Hazard Communication Program, and
- The laboratory is not used primarily to produce hazardous chemicals in bulk for commercial purposes.

If a research laboratory meets all these conditions, no further action is required under these instructions.

For the annual report to be accurate, it is essential that departments occupying each building on campus compile a Workplace Chemical Inventory that includes all chemicals that were present at the workplace (building) during the previous calendar year that met one of the following three requirements:

- 1. The chemical is a *hazardous chemical* and is normally present in the workplace (building) more than 55 gallons or 500 pounds, or
- 2. The *hazardous chemical* was present at a quantity of 10,000 pounds or greater at any time during the reporting calendar year, or
- 3. The chemical is an *Extremely Hazardous Substance* and could be found in the workplace (building) on any one day during the reporting calendar year in an amount equal to or greater than 500 pounds or the Threshold Planning Quantity (TPQ) whichever is lower, (see Extremely Hazardous Substance list at <a href="http://www.utexas.edu/safety/ehs/forms/chemicalinventory/">http://www.utexas.edu/safety/ehs/forms/chemicalinventory/</a>) or refer to Section 302 (EHS) TPQ of <a href="List of Extremely Hazardous Substances">List of Extremely Hazardous Substances</a> (External Link).

An update report is required to be submitted to EHS within 30-days if your department:

- Receives a new hazardous chemical that meets one of the above requirements
- Has a significant change in your most recent Workplace Chemical Inventory
- Begun operation and the storage of hazardous chemicals in a new facility or location

Some notes to bear in mind regarding these requirements:

1. A *hazardous chemical* is an element, compound, commercial product or mixture of these that is a health or physical hazard.

- 2. The federal list of *Extremely Hazardous Substances* is not a complete list of all reportable chemicals It is merely a list of extremely toxic, volatile, or easily dispersible chemicals that are given special attention under EPCRA and must be included in the Workplace Chemical Inventory as noted in item number 3 above. The list of Extremely Hazardous Substances can be found at the link below.
- 3. Lab *chemicals are exempt from the Workplace Chemical Inventory requirements* if the lab chemicals meet the requirements noted at the beginning of this section.

#### **PROCEDURE**

Read these instructions thoroughly prior to filling out the Workplace Chemical Inventory Form. Be sure to look over Section 302 (EHS) TPQ of <u>List of Extremely Hazardous Substances</u> (External Link) (EHS) to determine if any of your chemicals meets the definition of an extremely hazardous substance - as little as 1.0 pound of an EHS may be subject to reporting requirements. You only need to report materials that are required to be reported. These requirements are defined in the <u>Scope</u> section of this document.

If your department is exempt from these reporting requirements because you do not meet the reporting requirements defined in the <a href="Scope">Scope</a> section of this document only complete step 1 of this procedure and check the box in the top right-hand section of the Workplace Chemical Inventory.

- 1. For each page of the Workplace Chemical Inventory, the following information must be provided:
  - a. The **Campus** that this inventory is for. **Campus** may be: MAIN, PRC, MANOR, MSI, FAML, McObs, BFL, Lake Shop or another one of UT Austin's Campuses.
  - b. The **Date** when this chemical inventory was completed.
  - c. The full name of the **Supervisor** overseeing the completion of this form.
  - d. The name of the **Department** that owns the chemicals being reported.
  - e. The current Page number and the total number of pages submitted.
- 2. For each line item in the Workplace Chemical Inventory the following information must be provided:
  - a. **Building** The specific building where the product and/or chemical mixtures are located. Using the official 3-letter designation.
  - b. **Room** The specific room number where the product and/or chemical mixtures are located.
  - c. **Product Name** The complete name of the product or chemical compound. No abbreviations or shorthand are allowed.
  - d. **Chemical Ingredients** For products and/or chemical mixtures, list the chemical constituents here. The chemical composition is identified in the Safety Data Sheet (SDS) in <u>Section 3 Composition/Information on Ingredients</u>. There is limited space in the chemical ingredients section, and it may not be possible to list all the chemical's ingredients of the product or mixture. If the product or mixture has more than four constituents, simply list the first four constituents as they appear on the SDS.
  - e. **CAS Number** Provide the CAS number from the SDS for each of the chemical ingredients listed under **Chemical Ingredients.**

- f. **Concentration** Indicate the approximate concentration as a percentage for each of the chemical constituents listed under **Chemical Ingredients**.
- g. **Maximum Daily Amount** The maximum amount of each hazardous chemical compound or product at your facility should be based on the highest quantity of the substance (in pounds) that was stored at any one time during the requested calendar year.
  - i. *EXAMPLE*: Suppose that on one day during the year, 20,000 gallons of gasoline was stored at this facility. First this would need to be converted into pounds The general method for converting gallons into pounds involves the following formula:

(number of gal.).× 
$$8.3 \frac{lbs}{gal}$$
 × (specific gravity of chemical) =  $lbs.of$  chemical

The *specific gravity* of the substance is the mass to volume ratio that is unique for every substance. The specific gravity can be found in the SDS under <u>Section 9 – Physical and Chemical Properties</u>. The constant 8.3 serves to convert units of volume (gallons) into units of mass (pounds). Using this equation, we can convert our volume of gasoline into pounds by multiplication:

20000 gal.× 
$$8.3 \frac{lbs}{gal}$$
×  $0.76 = 126160$  lbs. of gasoline

The maximum daily amount of gasoline is 126,160 pounds.

- h. Average Daily Amount For each hazardous chemical compound or product, estimate the weight (in pounds) that was present at your facility during the year. To do this, total all daily weights and divide by the number of days the chemical was present on the site. The average daily amount can be estimated from inventory records and other measurements or by the following method if you do not know the amount of material generally on hand.
  - EXAMPLE: Suppose that this facility stores gasoline on its premises for six months out of the year. Invoice records show that your vendor made three deliveries to your facility, delivering 20,000 gallons of gasoline at each visit. Using the conversion above, the total amount of gasoline delivered was 378,480 pounds. Since the gasoline was kept on site for six months (approximately 180 days), the average daily amount is:

Total Quanity in lbs 
$$\div$$
 number of days on site = Avg. Daily Amount 378480 lbs  $\div$  180 days = 2103 lbs/day

i. **Storage Container** – Choose which of the following type of container is used to store the hazardous chemical AND include the size of the container.

Above Ground Tank	Underground Storage Tank	Tank Inside Building
Steel Drum	Plastic Drum	Can
Carboy	Silo	Fiber Drum
Bag	Box	Cylinder
Glass Container	Plastic Bottle or Jug	Tote Bin
Tank Wagon	Rail Car	Other – describe

j. On the first page of the submitted Workplace Chemical Inventory you must have an approval of the contents of the completed inventory by a department head (e.g. director, assistant director, etc.) Next

to **Approved By** the full name of the approver should be listed and should be indicated here with a signature.

i. *NOTE*: Ensure the signing department head is responsible for all location listed in the Workplace Chemical Inventory. If there is a location they are not responsible for a separate Workplace Chemical Inventory should be submitted with the correct department head signature.

#### **NOTE ABOUT LEAD ACID BATTERIES**

The Texas Commission on Environmental Quality requires some lead-acid batteries to be reported by The University of Texas at Austin on the annual report due to the sulfuric acid inside the batteries.

#### **Exemptions:**

Batteries that meet either of the following criteria do not have to be reported on your Workplace Chemical Inventory:

- Lead-acid batteries used for personal, family, or household purposes at the facility, or
- Lead-acid batteries labeled according to the Consumer Product Safety Commission (CPSC) and packaged for sale to consumers.

Fleet vehicle batteries do not have to be reported if the batteries are bought from a manufacturer who sells the same product to the general public, i.e. the batteries meet the CPSC labeling requirements.

#### **Reportable Batteries**

Batteries that are not consumer products and are not available to the general public do have to be reported. Some examples of these types of batteries are large batteries in a building used for power backup systems and large batteries in electric forklifts. Again, only report items that meet the quantity criteria in the <a href="Scope">Scope</a> section of this document.

#### What to Report

If possible, report the weight of the battery, the percent of electrolyte contained in the battery, and the percentage of sulfuric acid in the electrolyte solution. This information can usually be obtained from the battery manufacturer or supplier, the battery label, or the Safety Data Sheet (SDS) for the battery.

If this information cannot be easily obtained contact EHS and ask to speak with a Hazardous Material Specialist.

#### **RECORDING AND REPORTING**

A current Workplace Chemical Inventory is due by January 31st of each calendar year.

To submit, email the completed form(s) to <a href="mailto:EHS-HazardousMaterials@austin.utexas.edu">EHS-HazardousMaterials@austin.utexas.edu</a> with the subject line Workplace Chemical Inventory – XXXX. Where XXXX is the reporting year.

#### **REFERENCES**

Federal List of Extremely Hazardous Substances (External Link)

## **REVISIONS**

Date	Revision	Name
04/16/2020	Document created	Eric Wilson
01/04/2021	Minor revisions including	Eric Wilson
	clarification, link updates, and	
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