

Guidance for Worksheet 4 – Toxic Substance Use

Worksheet 4 only needs to be completed if the facility is a Large User of Toxic Substances.

The identification of toxic substances, or products containing toxic substances, is the first step to identifying opportunities for reduction. **Facilities must choose one of two approaches in the identification of toxic substances and complete Annual Progress Reports using this approach for the duration of the plan cycle (2020-2023):**

- **the Product Approach (Worksheet 4A)** - A hazardous product is any product that you are using which contains one or more toxic substances pursuant to section 313 of Title III of the Superfund Amendments and Reauthorization Act (SARA) in excess of 10,000 pounds per year or 1,000 pounds per year if 10% or more of all toxic substances. (See Appendix A or EAO website for the list of toxic substances.) The term product refers to inputs to the manufacturing process or product(s) found in or used on the final product produced by the facility. For some companies, focusing on products containing the greatest percentage of toxic substances may help in prioritizing reduction efforts.

OR

- **the Chemical Approach (Worksheet 4B)** - The chemical approach requires that facilities sum the amount of a particular toxic substance for all products containing that chemical; for example, if xylene is found in three separate products, you must determine the total amount of xylene used for all three.

You may want to start by using Safety Data Sheets (SDS) to develop an inventory of the products you use that contain toxic substances. This inventory, which should include product name, total pounds of product used, and percentage of hazardous constituents, will make it much easier to complete Worksheet 4A or 4B. You do not need to include chemicals or products in your inventory which are used at the facility for janitorial, grounds maintenance or general office purposes.

In addition to Safety Data Sheets, other good sources of information might include purchasing records, stockroom and inventory records, and vendor information. Regulatory reports like Tier II (Community-Right-to-Know) reports, federal Toxics Release Inventory (TRI) Form R reports, and hazardous waste manifests can also prove useful for identifying and establishing baseline toxic substance use.

Some companies have established electronic databases specifically to log and track purchases of toxic substances or products containing toxic substances. Software may be purchased or developed in-house to do this and can serve as the foundation to which you can add more detailed information as necessary for planning purposes and/or other government reporting requirements.

Worksheet 4A - Toxic Substance Use – Product Approach

Current Year: _____ (Calendar year immediately preceding the year in which this Worksheet is completed.)

PRODUCT APPROACH

1. List each PRODUCT which contains 50 percent or more toxic substances if more than 2,000 pounds of the product were used. *See example in shaded row below.*

Product	Amount of Product Used (lbs)	Toxic Substance(s) Found in Products	Total Concentration of Toxics (%)
<i>Example - A+ Lacquer Thinner</i>	<i>2300</i>	<i>Toluene (75%), methanol (5%)</i>	<i>80%</i>

2. List each PRODUCT which contains between 25 and 49 percent toxic substances, if more than 4,000 pounds of the product were used.

Product	Amount of Product Used (lbs)	Toxic Substance(s) Found in Products	Total Concentration of Toxics (%)
<i>Example - Hydrofluoric acid</i>	<i>10,000</i>	<i>Hydrofluoric acid</i>	<i>45%</i>

3. List each PRODUCT which contains between 10 and 24 percent toxic substances, if more than 10,000 pounds of product were used.

Product	Amount of Product Used (lbs)	Toxic Substance(s) Found in Products	Total Concentration of Toxics (%)
<i>Example – Bob’s Lactol Spirits</i>	<i>12,000</i>	<i>Toluene</i>	<i>20%</i>

4. List the sources of information that were used to determine the above quantities and concentrations. This could include Safety Data Sheets (SDS), vendor or manufacturer information, annual inventory reports, etc.

Worksheet 4B - Toxic Substance Use – Chemical Approach

Current Year: _____ (Calendar year immediately preceding the year in which this Worksheet is completed.)

CHEMICAL APPROACH

List each Toxic Substance if (a) more than 10,000 pounds are used during the year OR if (b) more than 1,000 pounds of the toxic substance is used and that amount exceeds 10% of all toxic substances used at the facility for the year. *See Examples for (a) and (b) in the shaded rows below.*

Toxic Substance Name	Product(s) Found In	Concentration of Toxic in Product(s) (%)	Amount of Product Used in the "Current Year" (lbs.)	Amount of Toxic Substance Used in the "Current Year" (lbs.) (column 3 x 4)	Total Chemical Used – Sum for Each Toxic (lbs.)
<i>(a) Toluene</i>	<i>Lactol Spirits</i>	<i>22%</i>	<i>50,000</i>	<i>11,000</i>	<i>11,000</i>
<i>(b) Methanol</i>	<i>Paint</i>	<i>12%</i>	<i>20,000</i>	<i>2,400</i>	<i>2,400</i>

List the sources of information that were used to determine the above quantities and concentrations. This could include Safety Data Sheets (SDS), vendor information, annual inventory reports, etc.
