# INSTRUCTIONS TIER I INVENTORY FORM

## **BACKGROUND**

Section 312 of the Emergency Planning and Community Right-to-Know Act (EPCRA) requires the owner or operator of facilities subject to Section 311 of EPCRA to submit an emergency and hazardous chemical inventory form by March 1 of each calendar year to the <a href="State Emergency Response">State Emergency Response</a> Commission (SERC), the Local Emergency Planning Committee (LEPC), and the local fire department.

Section 312 describes two reporting "tiers" for providing information on hazardous chemicals at a subject facility. As required by Section 312(g), EPA published two emergency and hazardous chemical inventory forms, Tier I and Tier II, for facilities to report information on hazardous chemicals.

The purpose of the Tier I form is to provide state and local officials and the public with information on the general hazard types and locations of hazardous chemicals present at the facility during the previous calendar year.

# WHO MUST SUBMIT THE TIER I INVENTORY FORM?

This requirement applies to the owner or operator of any facility that is required under regulations implementing the Occupational Safety and Health Act of 1970, to prepare or have available a Material Safety Data Sheet (MSDS) (also known as the Safety Data Sheet (SDS) for a hazardous chemical present at the facility.

**Note:** The MSDS (or SDS) requirements are specified in the Occupational Safety and Health Administration (OSHA) Hazard Communication Standard (HCS), found in Title 29 of the Code of Federal Regulations (CFR) at Section 1910.1200.

This form does not have to be submitted if all of the chemicals located at your facility are excluded under Section 311(e) of EPCRA or if the amount of each covered hazardous chemical never equals or exceeds the minimum thresholds listed in 40 CFR part 370.

## WHAT CHEMICALS ARE INCLUDED?

You must report the information required on this form for every hazardous chemical as defined under 29 CFR 1910.1200(c) present at your facility in the previous calendar year in quantities equal to or greater than established threshold amounts in 40 CFR part 370, unless the chemicals are excluded under Section 311(e) of EPCRA as specified below.

# WHAT CHEMICALS ARE EXCLUDED?

Section 311(e) of EPCRA excludes the following substances:

- 1) Any food, food additive, color additive, drug, or cosmetic regulated by the Food and Drug Administration;
- 2) Any substance present as a solid in any manufactured item to the extent exposure to the substance does not occur under normal conditions of use:

- Any substance to the extent it is used for personal, family, or household purposes, or is
  present in the same form and concentration as a product packaged for distribution and
  use by the general public;
- 4) Any substance to the extent it is used in a research laboratory or a hospital or other medical facility under the direct supervision of a technically qualified individual; and
- 5) Any substance to the extent it is used in routine agricultural operations or is a fertilizer held for sale by a retailer to the ultimate customer.

**Note:** These exclusions apply only to those substances that are used in the way they are described in section 311(e). A facility may have other chemicals that may be subject to reporting.

# REPORTING THRESHOLDS

Minimum thresholds have been established for Tier I/Tier II reporting in 40 CFR part 370.

## These thresholds are as follows:

For Extremely Hazardous Substances (EHSs) designated under EPCRA Section 302 the reporting threshold is 500 pounds (or 227 kg.) or the threshold planning quantity (TPQ), whichever is lower. (EHSs and their TPQs are listed in 40 CFR part 355, <u>Appendix A</u> and <u>Appendix B</u>).

For gasoline (all grades combined) at a retail gas station, the threshold level is 75,000 gallons (or approximately 283,900 liters), if the tank(s) was stored entirely underground and was in compliance at all times during the preceding calendar year with all applicable Underground Storage Tank (UST) requirements at 40 CFR part 280 or requirements of the state UST program approved by the Agency under 40 CFR part 281.

For diesel fuel (all grades combined) at a retail gas station, the threshold level is 100,000 gallons (or approximately 378,500 liters), if the tank(s) was stored entirely underground and the tank(s) was in compliance at all times during the preceding calendar year with all applicable Underground Storage Tank (UST) requirements at 40 CFR part 280 or requirements of the state UST program approved by the Agency under 40 CFR part 281.

For all other hazardous chemicals for which facilities are required to have or prepare an MSDS (SDS), the minimum reporting threshold is 10,000 pounds (or 4.540 kg.)

**Note:** A retail gas station means a retail facility engaged in selling gasoline and/or diesel fuel principally to the public for motor vehicle use on land.

You need to report hazardous chemicals that were present at your facility at any one time during the previous calendar year at levels that equal or exceed these thresholds.

**Note:** States may have lower reporting thresholds and additional chemicals covered by the state right-to-know regulations.

Contact your state for any additional requirements.

# WHEN TO SUBMIT THIS FORM?

Owners or operators of facilities that have hazardous chemicals present at the facility at any one time in quantities equal to or greater than set threshold levels must submit either Tier I or Tier II form by March 1 annually regarding information on hazardous chemicals present at the facility in the previous calendar year.

**Note:** All states currently require facilities to submit federal Tier II inventory form or the state developed Tier II inventory form in hard copy or the electronic format including on-line reporting and certification. Facilities should contact their state for the specific requirements for that state.

# WHERE TO SUBMIT THIS FORM?

Send the completed Tier II form to each of the following organizations:

- 1) Your State Emergency Response Commission (SERC)
- 2) Your Local Emergency Planning Committee (LEPC)
- 3) The fire department with jurisdiction over your facility

**Note:** Contact your state for specific submission requirements.

#### INSTRUCTIONS TO PAGE ONE OF THE TIER I INVENTORY FORM

Please refer to the regulations at 40 CFR 370.41 for the required data elements on the Tier I inventory form that are specified below. For the definition of hazardous chemical, physical and health hazards and for other terms used in these Instructions, refer to the regulations at 40 CFR 370.66.

You may use the Tier II inventory form as a worksheet for completing Tier I. Filling in the Tier II chemical information section should help you assemble your Tier I responses.

**Note:** Currently, all states require facilities to either submit the federal Tier II inventory form or the state-developed inventory form or format, including electronic reporting and/or on-line submission and certification. Some states may require submission of both Tier I and Tier II forms. Contact your state for specific requirements in that state.

Each of the data element listed below are required, unless it is indicated as "optional".

#### REPORTING PERIOD

Enter the appropriate calendar year, beginning January 1 and ending December 31.

# **IDENTICAL INFORMATION**

Check the box located at the top of page one of the form, if the information reported on page one is identical to that submitted last year. If any information has changed since the previous reporting year, make revisions as appropriate. Each data element must be provided even if it is identical to the submission in the previous calendar year.

# **FACILITY IDENTIFICATION**

- Enter the complete name and address of the location of your facility where the hazardous chemicals are stored. Enter the full street address or state road, county, city, state, and zip code.
- Provide a general phone number for your facility. (Note: This is an optional data element.)
- Provide the latitude and longitude for the location of your facility. Facilities should use
  accepted practices to determine the latitude and longitude of the facility rather than
  just estimate the coordinates.
- Indicate if the facility is manned or unmanned. If the facility is manned at least part of the day, check the box "manned". The box "unmanned" should only be checked if the facility is never manned.
- Estimate the maximum number of occupants that may be present at any one time at your
  facility. If the facility is manned at least part of a day, indicate the number of persons present.
  You should include contractors, vendors and people that may be present for any training or
  other events as well as employees. If the location is never manned, check the box marked
  "N/A".

**Note:** This information is useful for state and local emergency planners to include people at your facility in the emergency response plan and for planning evacuation during an emergency.

- Enter the primary North American Industry Classification System (NAICS) code for your facility.
- Enter the Dun & Bradstreet number of your facility. The financial officer of your facility should be able to provide the Dun & Bradstreet number. If your facility does not have this information, contact the state or regional office of Dun & Bradstreet to obtain your facility number or have one assigned.

## SUBJECT TO EMERGENCY PLANNING

Indicate if your facility is subject to emergency planning notification under Section 302 of EPCRA. Check the box "yes" or "no".

# SUBJECT TO CHEMICAL ACCIDENT PREVENTION

Indicate if your facility is subject to chemical accident prevention provisions under Section 112(r) of the Clean Air Act, also known as the Risk Management Program (RMP), codified in 40 CFR part 68. Check the box "yes" or "no".

# **IDENTIFICATION NUMBER UNDER THE TOXIC RELEASE INVENTORY (TRI) PROGRAM**

If your facility is subject to the <u>Toxic Release Inventory</u> (TRI) program under Section 313 of EPCRA, provide the identification number assigned by EPA. If your facility is not subject to this reporting requirement or if your facility has not been assigned a number under this program, check the box marked "N/A".

# IDENTIFICATION NUMBER UNDER THE RISK MANAGEMENT PROGRAM (RMP)

If your facility is subject to the chemical accident prevention provisions codified in 40 CFR part 68, also known as the Risk Management Program (RMP), provide the facility identification number assigned by EPA. If your facility is not subject to this provision or if your facility has not been assigned a number, check the box marked "N/A".

# **OWNER/OPERATOR**

Enter the owner or operator's full name, mailing address, and phone number. Provide the email address of the owner or operator of the facility.

# **PARENT COMPANY (optional)**

Enter the name, mailing address, phone number, email address and Dun & Bradstreet number of the facility's parent company.

## **FACILITY EMERGENCY COORDINATOR**

Enter the name, title, email address, phone number and 24-hour phone number of the facility emergency coordinator that you are required to provide under EPCRA Section 303(d)(1).

Note: This data element is only applicable to facilities subject to EPCRA Section 302(c), emergency planning notification. Section 303(d)(1)

Of EPCRA requires facilities subject to the emergency planning notification requirement under Section 302(c) to designate a facility representative who will participate in the local emergency planning process as a facility emergency coordinator.

This data element is also applicable to additional facilities designated by the Governor or the SERC under EPCRA Section 302(b)(2).

EPA encourages facilities not subject to the emergency planning notification requirement also to provide this information, for effective emergency planning in your community.

## TIER I INFORMATION CONTACT

Enter the name, title, email address and phone number of the person completing the information on the Tier I inventory form.

# **EMERGENCY CONTACT(S)**

Enter the name, title, phone number and email address of at least one local person or office that can act as a referral if emergency responders need assistance in responding to a chemical accident at the facility. If there is more than one person assigned to this duty, provide the same information for that person.

Also, provide an emergency phone number where such emergency information will be available 24 hours a day, every day. The facility must make some arrangement to ensure that a 24-hour contact is available.

## **CERTIFICATION**

The owner or operator or the officially designated representative of the owner or operator must certify that all information included in the Tier I submission is true, accurate, and complete. On the Tier I form, enter your full name and official title. Sign your name and enter the current date. All other pages including all attachments must also contain your signature or signature stamp, the date you signed the certification and the total number of pages in the submission.

**Note:** Facilities should contact their state for specific requirements for the submission and certification.

#### INSTRUCTIONS TO PAGE TWO OF THE TIER I INVENTORY FORM

#### **IDENTICAL INFORMATION**

Check the box located at the top of page two of the Tier I inventory form, if the information reported on page two is identical to that submitted last year. Chemical descriptions, hazard types, amounts, and locations must be provided every year, even if the information is identical to that submitted last year.

# PHYSICAL AND HEALTH HAZARDS

This section requires aggregate information on hazardous chemicals categorized by the physical and health hazards listed. The physical and health hazards are defined in the OSHA Hazard Communication Standard, 29 CFR 1910.1200, which EPA has adopted in a Federal Register notice on June 13, 2016 (81 FR 38104). See also the correction notice published on July 22, 2016 (81 FR 47311).

These Federal Register notices and the fact sheet are available online: <a href="https://www.epa.gov/epcra/epcra-non-section-313-amendments-and-guidance#technical amendment">https://www.epa.gov/epcra/epcra-non-section-313-amendments-and-guidance#technical amendment</a>

Physical Hazards	Health Hazards
Floorenski (see ee	Construents the
Flammable (gases, aerosols, liquids, or solids)	Carcinogenicity
Gas under pressure	Acute toxicity (any route of exposure)
Explosive	Reproductive toxicity
Self-heating	Skin Corrosion or Irritation
Pyrophoric (liquid or solid)	Respiratory or Skin Sensitization
Oxidizer (liquid, solid or gas)	Serious eye damage or eye irritation
Organic peroxide	Specific target organ toxicity (single or repeated exposure)
Self-reactive	Aspiration Hazard
Pyrophoric gas	Germ cell mutagenicity
Corrosive to metal	Simple Asphyxiant
In contact with water emits flammable gas	Hazard Not Otherwise Classified (HNOC)
Combustible Dust	
Hazard Not Otherwise Classified (HNOC)	

Table 1. Physical and Health Hazards

# **DESCRIPTIONS, AMOUNTS, AND LOCATIONS**

## What units should I use?

Report all amounts as weight in pounds (lbs.) To convert gas or liquid volume to weight in pounds, multiply by an appropriate density factor.

## What about mixtures?

If a hazardous chemical is part of a mixture, you have the option of reporting either the weight of the entire mixture or only the portion of the mixture that is a particular hazardous chemical (e.g., if a hazardous solution weighs 100 lbs., but is composed of only 5% of a particular hazardous chemical, you can indicate either 100 lbs. of the mixture or 5 lbs. of the hazardous chemical).

The option used for each mixture at your facility must be consistent with the option used in your Section 311 reporting.

Because EHSs are important to EPCRA Section 303 emergency planning, EHSs have lower reporting thresholds. The amounts of all EHSs at a facility (both pure EHS substances and EHSs in mixtures) must be aggregated to determine if reporting thresholds for EHSs are met, that is, 500 lbs. or the TPQ, whichever is less. It is suggested that the aggregation calculation be done as a first step in determining if reporting thresholds have been met. Once you determine whether a threshold has been reached for an EHS, you should report either the total weight of the EHS at your facility, or the weight of each mixture containing the EHs.

Where do I count a chemical that is a fire, self-reactive and an acute toxicity health hazard?

Add the chemical's weight to your totals for all three hazard categories and include its location in all three categories. Many chemicals fall into more than one hazard category.

#### MAXIMUM AMOUNT AND AVERAGE DAILY AMOUNT

For each hazard type, indicate the maximum amount and average daily amount and general locations of all applicable chemicals present at your facility during the past year. The table of range codes and corresponding amounts for reporting maximum amount and average daily amount are presented below.

Table 2. Reporting Ranges

Range	Weight Range in Pounds		
Codes			
	From	То	
01	0	99	
02	100	499	
03	500	999	
04	1,000	4,999	
05	5,000	9,999	
06	10,000	24,999	
07	25,000	49,999	
08	50,000	74,999	
09	75,000	99,999	
10	100,000	499,999	
11	500,000	999,999	
12	1,000,000	9,999,999	
13	10,000,000	Greater than 10 million	

#### **Maximum Amount**

The amounts of chemicals you have on hand may vary throughout the year. The peak weights and the greatest single-day weights during the year are added together in the column (page 2 of the form) to determine the maximum weight for each hazard type. Since the peaks for different chemicals often occur on different days, this maximum amount will seem artificially high.

**Note**: If your state requires to you to also submit Tier I Inventory form, you may choose to use the Tier II form as a worksheet to complete this and the following sections.

## To determine the Maximum Amount:

List all of your reportable hazardous chemicals individually to determine.

- 1) For each chemical:
  - a. Indicate all physical and health hazards that the chemical presents. Include all chemicals, even if they are present for only a short period of time during the year.
  - b. Estimate the maximum weight in pounds that was present at your facility on any single day of the reporting period.
- 2) For each hazard type, beginning with the hazard "flammable" and repeating for all physical and health hazard types:
  - a. Add the maximum weights of all chemicals you indicated as the particular hazard type.
  - b. Look at the Reporting Ranges (Table 2). Find the appropriate range value code.
  - c. Enter this range value as the Maximum Amount.

# Example:

You are reporting phenol and sulfuric acid. If you are using the Tier II form as a worksheet, list raw weights in pounds for each of your hazardous chemicals. Then you would mark an "X" in the "Acute toxicity" hazard column for phenol and sulfuric acid. The maximum amount raw weights you listed were 10,000 lbs. and 500 lbs. respectively. You add these together to reach a total of 10,500 lbs. Then you look at the Reporting Ranges in Table 2 and find the range code that corresponds to 10,500 lbs. Enter that code as your Maximum Amount for Acute toxicity hazard. You also marked an X in the "flammable" hazard box for phenol. When you calculate your Maximum Amount totals for "flammable" hazards, add the 10,000 lbs. weight again.

## **Average Daily Amount**

This column should represent the average daily amount of chemicals of each hazard type that were present at or above the applicable thresholds at your facility at any point during the year. To determine this amount:

- 1) List all of your reportable hazardous chemicals individually (same as for Maximum Amount).
- 2) For each chemical:
  - a. Indicate all physical and health hazards that the chemical presents (same as for Maximum Amount).
  - b. Estimate the average weight (in pounds) that was present at your facility throughout the year. To do this, total all daily weights and divide by the number of days the chemical was present on the site.
- 3) For each hazard type, beginning with the hazard "flammable", repeat for all physical and health Hazards:
  - a. Add the average weights of all chemicals you indicated for the particular hazard type.
  - b. Look at the Reporting Ranges in Table 2. Find the appropriate range value code.
  - c. Enter this range value as the Average Daily Amount.

# **Example:**

You have nicotine and phenol on site which exceeded the reporting thresholds. If you are using the Tier II form as your worksheet, and have marked an "X" in the "acute toxicity" hazard column for nicotine and phenol. Nicotine is present at your facility 100 days during the year, and the sum of the daily weights is 100,000 lbs. By dividing 100,000 lbs. by 100 days on-site, you calculate an Average Daily Amount of 1,000 lbs. for nicotine. Phenol is present at your facility 50 days during the year, and the sum of the

daily weights is 10,000 lbs. By dividing 10,000 lbs. by 50 days on-site, you calculate an Average Daily Amount of 200 lbs. for phenol. You then add the two average daily amounts together to reach a total of 1,200 lbs. Then you look at the Reporting Range in Table 2 and find that the range code 04 that corresponds to 1,200 lbs. Enter 04 as your Average Daily Amount for Acute toxicity hazard. You also marked an "X" in the "flammable" hazard column for phenol. When you calculate your Average Daily Amount for "flammable" hazards, use the 200 lb. weight for phenol again.

# **Number of Days On-Site**

Enter the greatest number of days that a single chemical within that hazard category was present on-site.

# Example:

At your facility, nicotine is present for 100 days and phosgene is present for 150 days. Enter 150 in the space provided.

## **General Location**

Enter the general location within your facility where each hazard may be found. General locations should include the names or identifications of buildings, tank fields, lots, sheds, or other such areas. For each hazard type, list the locations of all reportable chemicals. As an alternative, you may also attach a site plan and list the site coordinates related to the appropriate locations. If you do so, check the box "I have attached a site plan" on page two of the form.

# Example:

On your worksheet you have marked an X in the "flammable" hazard column for acetone and butane. You noted that these are kept in steel drums in Room C of the Main Building, and in pressurized cylinders in Storage Shed 13, respectively. You could enter Main Building and Storage Shed 13 as the General Locations of your chemicals with flammable hazards. However, if you choose to attach a site plan, then list coordinates. Check the box "I have attached a site plan" on page two of the Tier I form and enter site coordinates for the Main Building and Storage Shed 13 under General Locations. If you need more space to list locations, attach an additional Tier I form and continue your list on the proper line. Number all pages.

# **OPTIONAL ATTACHMENTS**

Indicate at the bottom of page two of the form if you are including any site plan, information on dikes and other safeguards measures, etc.