

Tier II Reporting Methodology

What is Tier II Reporting?

- **MARCH 1 ANNUAL REPORTING DEADLINE**
- Annual federal report required for companies that store hazardous materials, under the Emergency Planning and Community Right-to-Know Act (EPCRA). EPCRA includes:
 - Emergency Planning (Section 301-303)
 - Emergency Release Notification (Section 304)
 - Hazardous Chemical Storage and Reporting Requirements (Sections 311-312)
 - Toxic Chemical Release Inventory (TRI/Form R; Section 313)
 - Tier II (Section 312)
 - Reporting of hazardous and toxic substances that are housed at a facility at any given point during the reporting year. Facilities are required to report Tier II substances and Extremely Hazardous Substances (EHS) that are equal to or greater than the reporting threshold for that material.
 - https://epa.ohio.gov/static/Portals/27/serc/SERC_EHS_List.pdf

Who Is Required to File a Tier II Report?

- A facility is subject to the OSHA Hazard Communication Standard; and
- Facility uses, produces, and/or stores a Hazardous Chemical and/or an Extremely Hazardous Substance (EHS); and
- The quantity of one of these Hazardous Chemicals or Extremely Hazardous Substances is more than the Threshold Quantity (TQ), at any one point in time, on any one given day.

Excluded Chemicals

Section 311(e) of EPCRA excludes the following:

- Any food, food additive, color additive, drug, or cosmetic regulated by the Food and Drug Administration;
- 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;
- 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
- 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.

Reporting Thresholds

- Threshold quantity for Hazardous Chemicals is 10,000 lbs.
- Threshold quantity for Extremely Hazardous Substances is 500 lbs. or the listed Threshold Planning Quantity (TPQ), whichever is less. (EHSs and their TPQs are listed in 40 CFR 355, Appendix A and B.)
- Retail Gas Station:
 - Gasoline (all grades combined): 75,000 gallons, if stored in tanks(s) entirely underground.
 - Diesel (all grades combined): 100,000 gallons if stored in tanks(s) entirely underground.

Submit Report

- Check state specific report submission requirements, including any reporting fees
 - <https://www.epa.gov/epcra/state-tier-ii-reporting-requirements-and-procedures>
 - Ohio: <https://www.epa.gov/epcra/tier2-submit-software>
- Electronic Filing (Preferred)
 - Tier2Submit, or state specific format, electronic software
 - Email or mail Tier2Submit .zip or .t2s file or flash drive and certification statement to:
 - State Emergency Response Commission and
 - Local County Emergency Planning Committee Information Coordinator
 - Mail a paper copy from the Tier2Submit report and site map to Local Jurisdictional Fire Department
- Paper Filing:
 - Facility Identification Forms
 - Facility Map
 - Emergency and Hazardous Chemical Inventory Form
 - Submit to:
 - State Emergency Response Commission
 - Local County Emergency Planning Committee Information Coordinator
 - Local Jurisdictional Fire Department

Tier II Report Preparation

- Download current reporting year Tier2Submit, or your state's specific reporting software:
 - <https://www.epa.gov/epcra/tier2-submit-software>; or
 - <https://www.epa.gov/epcra/state-tier-ii-reporting-requirements-and-procedures>
- Collected facility information for report:
 - Facility Identification Forms
 - Site map
 - Chemical description, storage method, hazards, amounts, locations
 - Certification statement
 - Filing Fee Calculation Form

Tier II Inventory Form Information

Reporting Period:

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

Identical Information:

- Check the box at the top of the form, if the information reported on page one is identical to what was reported the previous year.

Facility Identification:

- Enter the complete name and address of the facility where the chemicals are stored.
- Enter the full street address, county, state and zip code.
- Optional: Provide a general phone number for your facility.
- Provide the latitude and longitude for the location of the facility.
- Indicated if the facility is manned or unmanned. If the facility is manned at least part of the day, check “manned”. Check “unmanned” only if the facility is never manned.
- Provide an estimated maximum number of occupants that may be present at any one time at the facility. This estimate should include contractors, vendors, visitors, and other non-employees who may be onsite.
- If the facility is unmanned, check the “N/A” box.
- Enter the primary North American Industry Classification System (NAICS) code for the facility.
 - NAICS codes can be determined at <https://www.census.gov/naics/>
 - Your facility’s financial officer should be able to provide this information.
- Enter the facility’s Dun & Bradstreet (D&B) number. The facility’s financial officer should be able to provide this information. If your facility does not have a D&B number, contact the state or regional office of Dun & Bradstreet to obtain one.

Subject to Emergency Planning:

- Indicate, by checking “Yes” or “No”, if the facility has an EHS over the TPQ and is subject to the emergency planning notification requirements under EPCRA Section 302 for EHSs.
 - The list of EHSs can be found here: <https://www.ecfr.gov/current/title-40/chapter-I/subchapter-J/part-355#Appendix-A-to-Part-355>

Subject to Chemical Accident Prevention:

- Indicate, by checking “Yes” or “No”, if the facility is subject to chemical accident prevention provisions under Section 112[®] of the Clean Air Act, also known as the Risk Management Program (RMP).

Identification Number Under the Toxic Release Inventory (TRI) Program:

- If the facility is subject to reporting under the Toxic Release Inventory (TRI) program under Section 313 of EPCRA, provide the facility’s identification number. If the facility is not subject to TRI reporting, check the box marked “N/A”.

Identification number under the Risk Management Program (RMP):

- If the facility is subject to the Risk Management Program, provide the facility identification number assigned by the US EPA. If the facility is not subject to RMP provisions, check the box marked “N/A”.

Owner/Operator:

- Enter the owner/operator's name, mailing address, phone number and email address.

Optional Parent Company:

- Enter the name, mailing address, phone number, email address, and D&B 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's emergency coordinator.

Tier II Information Contact:

- Enter the name, title, email address and phone number of the person at the facility who is knowledgeable about the information contained in the Tier II report.

Emergency Contact:

- Enter the name, title, email address, phone number, and 24-hour phone number of at least one local person or office that can act as a referral if emergency responders need assistance.

Certification:

- The owner or operator or their officially designated representative must certify that all information included in the Tier II report is true, accurate, and complete. Enter their full name and title, then have them sign and date the report.
- Enter the total number of pages included in the Confidential and Non-Confidential Information Sheets as well as all attachments.
- An original signature is required on the first page of the report, subsequent pages must either contain an original signature or a signature stamp.

Chemical Information Section

Provide specific information on the amounts and locations of the facility's hazardous chemicals. Separate fields are provided for reporting both pure chemicals and chemical mixtures. Use additional pages as necessary.

If the reported information is identical to the information that was reported the previous year, check the box indicating that. Chemical descriptions, hazards, quantities, and locations must still be reported even if the information is identical to the previous year's report.

Trade Secret Claim

- If you are withholding the name of a pure chemical or mixture as a trade secret in accordance with criteria specified in EPCRA Section 322, enter the generic class or category that is structurally descriptive of the chemical (e.g., listing toluene diisocyanate as organic isocyanate) and check the box marked "Trade Secret". Trade secret information should be submitted to US EPA at the same time you submit the Tier II report or state equivalent, and must include substantiation. Trade secret regulations can be found in 40 CFR 350.
- Trade secret substantiation forms and instructions can be accessed online at: <http://www2.epa.gov/epcra/epcra-trade-secret-forms-and-instructions>

Chemical Description: Pure Chemical

- Check the box indicating if the information is identical to what was reported the previous year.
- Provide the chemical name (or common name of the chemical) as provided on the SDS.
- Provide the Chemical Abstract Service (CAS) registry number for the chemical.
- Indicate if the chemical is an EHS, by checking “Yes” or “No”.
- Indicate if you are withholding the name of the chemical as a trade secret, by checking the “Trade Secret” box.

Chemical Description: Mixture

Facilities have the option of reporting by the component or the mixture itself.

- Check the box indicating if the information is identical to what was reported the previous year.
- Provide the name of the mixture, product name or trade name as provided on the SDS.
- Provide the Chemical Abstract Service (CAS) registry number for the mixture, if available.
- Indicate if you are withholding the name of the chemical as a trade secret, by checking the “Trade Secret” box.
- Indicate if the mixture contains an EHS, by checking “Yes”, then enter the name and CAS number of each EHS within the mixture.
 - You are not required to list the non-EHS components of the mixture.

Physical and Health Hazards

For each chemical you report, check all the applicable physical and health hazard boxes. Hazard categories are defined in 40 CFR 370.66 and 29 CFR 1910.1200.

Table 1 Physical and Health Hazards

Physical Hazards	Health Hazards
Explosive	Acute toxicity (any route of exposure)
Flammable (gases, aerosols, liquids, or solids)	Skin corrosion or irritation
Oxidizer (liquid, solid or gas)	Serious eye damage or eye irritation
Self-reactive	Respiratory or skin sensitizer
Pyrophoric (liquid or solid)	Germ cell mutagenicity
Pyrophoric gas	Carcinogenicity
Self-heating	Reproductive toxicity
Organic peroxide	Specific target organ toxicity (single or repeated exposure)

Physical Hazards	Health Hazards
Corrosive to metal	Aspiration hazard
Gas under pressure (compressed gas)	Simple asphyxiant
In contact with water emits flammable gas	Hazard Not Otherwise Classified (HNOC)
Combustible dust	
Hazard Not Otherwise Classified (HNOC)	

Example:

Facility receive one large shipment of a solvent mixture last year. The shipment filled five 5,000-gallon storage tanks. You know that the solvent contains 10% benzene, which is a hazardous chemical. You figure that 10% of 25,000 gallons is 2,500 gallons. You also know that the density of benzene is 7.29 pounds per gallon, so you multiply 2,500 gallons by 7.29 pounds per gallon to get a weight of 18,225 pounds. Then you look at Table 2 and find that the range value 06 corresponds to 18,225 pounds. You enter 06 as the Maximum Amount.

Maximum Amount

- For each pure chemical or mixture, estimate the maximum amount onsite at the facility on any single day during the reporting period.
- For mixtures, you must list any EHS(s) present in the mixture and the maximum amount and CAS number(s) for each.
- Enter the range value as the maximum daily amount.

Table 2 Reporting Ranges

Range Code	Weight Range in Pounds	
	From	To
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

Range Code	Weight Range in Pounds	
	From	To
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

Average Daily Amount

- For each pure chemical or mixture, estimate the average amount onsite at the facility on any single day during the reporting period.
 - Total all daily weights and divide by the number of days the chemical was onsite.
- Enter the range value as the average daily amount.

Example:

The 25,000 gallon shipment of solvent you receive last year was gradually used up and completely gone in 315 days. The sum of the daily volume levels in the tank is 4,536,000 gallons. By dividing 4,536,000 gallons by 315 days onsite, you calculate an average daily amount of 14,400 gallons.

You already know that the solvent contains 10% benzene, which is a hazardous chemical. Since 10% of 14,400 is 1,440, you figure that you had an average of 1,440 gallons of benzene. You also know that the density of benzene is 7.29 pounds per gallon, so you multiple 1,440 by 7.29 to get a weight of 10,500 pounds. Then you look at Table 2 and find that the range value 06 corresponds to 10,500. You enter 06 as the Average Daily Amount.

Number of Days Onsite

- Enter the number of days that the hazardous chemical was on site.

Storage Types and Conditions

- Enter the types and conditions of storage for each hazardous chemical.
- Table 3: Provides some examples of common storage types.
- Table 4: Identify the storage pressure and temperature conditions.

Table 3: Storage Types	Table 4: Pressure and Temperature Conditions
Aboveground storage tank	Pressure
Below ground storage tank	Ambient
Tank inside building	Greater than ambient pressure
Steel drum	Less than ambient pressure
Plastic or non-metallic drum	
Silo	Temperature
Fiber drum	Ambient temperature
Bag	Greater than ambient temperature
Box	Less than ambient temperature, but not cryogenic
Cylinder	Cryogenic conditions
Gas bottles or jugs	
Plastic bottles or jugs	
Tote bin	
Rail car	
Battery	

Storage Locations

- Confidential Location Information
 - Indicate if your facility is claiming the location information as confidential by checking the “Yes” or “No” box.
- Non-confidential locations
 - Provide brief description of the location of each chemical, building, lot, room, or area.
 - If the chemical is present in multiple locations, identify each as appropriate.