

Tier II Reporting Overview

What is Tier II Reporting

Tier II is an annual federal report that is mandatory for companies that store hazardous materials. After a series of hazardous waste releases that caused human and environmental harm, there was a great need for reporting on hazardous materials that are housed within industrial facilities. This led to [Emergency Planning and Community Right-to-Know Act \(EPCRA\)](#) being passed in 1986. The EPCRA group of regulations includes:

- Emergency planning (Sections 301-303).
- Emergency release notification (Section 304).
- Hazardous Chemical Storage Reporting Requirements (Sections 311-312).
- Toxic Chemical Release Inventory (Section 313).

Tier II (SARA 312) is under section 312 of EPCRA and it is a mandatory report of hazardous and toxic substances that are housed at your 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 defined Tier II reporting thresholds. These substances must maintain an SDS under OSHA's hazard communication standard.

Who Must File a Tier II Report

Facilities that store hazardous chemicals must report their inventory in the Tier II report.

You must submit a report if:

- A facility has **greater than or equal to 10000 pounds of any hazardous chemical by OSHA criteria**, then it should be reported in the Tier II report. **(In California and a few states, it is 500 pounds).**
- A facility at any given time during the reporting year stored material on the EPA Extremely Hazardous Substance list to the materials' defined Threshold planning Quantity (TPQ). The EPA has a comprehensive [EHS list](#) that shows all the chemicals that should be reported.
- You have reached the threshold for gasoline storage which is 75000 gallons and 100000 gallons for diesel fuel at a retail gas station. This threshold applies if there was entire underground storage and full compliance with the Underground Storage Tank (UST) requirements.
- Your Local Emergency Planning Committee (LEPC) needs you to submit an SDS for Hazardous chemical if your LEPC and State Emergency Response Commission (SERC) or fire department asks you to submit Tier II then the threshold level for reporting is zero.

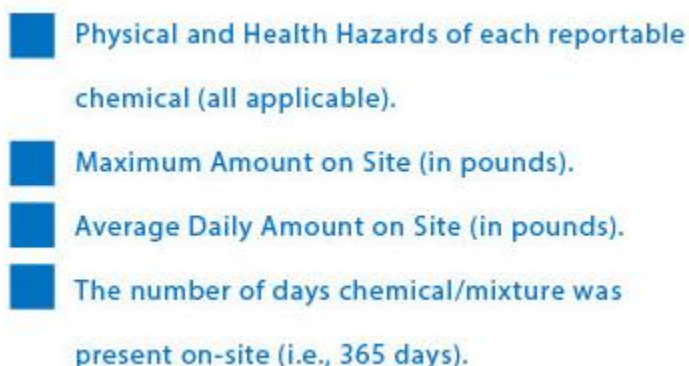
Remember that some states have stricter reporting requirements and thresholds, therefore you should make sure that you stay up to date with your specific [state reporting requirements](#).

What Should You Report for Tier II?

You must report the inventory information for quantities of hazardous chemicals that were housed at your facility at any time during the reporting year that are greater than or equal to the threshold. All states require Tier II submission, and it is **mandatory for all facilities**. All substances and chemicals that require an SDS must be recorded. Do not be selective, record all the chemicals, that way you will have a full inventory list when you start generating your report.

Once you have the full list of your chemicals, consult the Tier II chemical list for which ones must be reported. Of these chemicals, the aspects that should be listed in a Tier II report are listed below:

- Physical and Health Hazards of each reportable chemical (all applicable).
- Maximum Amount on Site (in pounds).
- Average Daily Amount on Site (in pounds).
- The number of days chemical/mixture was present on-site (i.e., 365 days).
- Storage Types, Conditions, and Locations.



You must describe the specific location of the chemical to help emergency responders to access it quickly and clearly show the building or room in which it is stored. It is helpful to provide a comprehensive site map for the chemical(s). If you would like to claim any confidential locations, you must submit your confidential location information with your Tier II report if available.

Reporting Methods

When you are tracking your hazardous chemicals, there are various ways of reporting them. This can be done by tracking:

- **Standing inventory** - take note of the inventory in your facility, don't forget to take note of the expired materials.
- **Usage patterns** - track how much material that you are using but remember usage does not directly equate to the amount that you have on-site. Therefore, it should be used as a factor among the other tracking methods.

- **Monthly purchase records** - this is a good way of tracking what products are on-site each month and can contribute to the usage records.
- **Monthly inventory** - Tracking your inventory monthly will make it easier to show when you had the hazardous chemical and how long it was on site.
- **Combination** - the best way of effectively making the calculation is to combine all the tracking methods mentioned above and using a software solution can make this process effortless.

With this information, you can use three different methodologies:

Method one - Uses standing inventory to give snapshots of chemicals on-site at a given time.

Method two - Daily/monthly calculated inventory, this combines purchase records and usage records.

Method three – This is when you use the best available information for tracking. If your site does not maintain inventory records, you calculate the maximum onsite as an approximation of usage. Also, consider if the chemicals are purchased in bulk and how long it takes to use the purchased products. You can use these amounts to calculate maximums by usage summation.

What about chemical analysis and mixture analysis for Tier II Reporting?

Reporting mixtures can be a tricky situation but it is easily handled by knowing the reportable chemicals in the mixture. You have the option to either report the entire mixture or the portion of the mixture that is hazardous. You must combine the amount of EHS for effective threshold determination. Make sure that the option that you choose for each mixture is consistent with the one used in your report.

Tier II Reporting: Timeline and Steps

The steps to Tier II reporting start from effective record keeping. You must keep all your inventory, usage, and storage information ready for reporting. The next step would be to create a Tier II project to start organizing all your Tier II information. The process also includes selecting a processing method based on the methods mentioned above. After adding all the reportable chemicals' quantities and details comes the review step. This is when you review all the chemicals that you have entered individually to make sure you have included everything accurately. Double check the maximum and average quantities on sight. After the review process, you are now ready to submit your Tier II report through the software of your choice.

The Process Flow Of Tier II Reporting



Tier II Reporting Exemptions

Several chemicals are exempt from Tier II reporting. Substances that are solid and don't cause any exposure during normal use are often exempt from reporting. However, take special note for items that seemingly fit this description but are in fact regulated - for example lead-acid batteries are solid during normal use, but OSHA has determined that they are not exempt because they have the potential to leak, spill, or break during everyday use. Other exempt materials include substances used in research laboratory hospitals, and routine agricultural operations. More exemptions and guidelines are listed in the diagram below.



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.



Any food, food additive, color additive, drug or cosmetic regulated by the FDA.



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 used for personal, family or household purposes - or is present in the same form and concentration as a product packaged for consumer use.



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 consumer.
It is the EPA's position that routine agricultural operations do not include the refrigeration systems used to keep products cold.

When is The Tier II Reporting Deadline?

The Tier II report is due on **March 1st** every year.

- This is a fixed deadline, and the EPA does not grant extensions to this deadline.
- Tier II forms should be submitted to your SERC, LEPC, and local fire department before March 1st.
- Failure to submit your Tier II Report is a **Emergency Preparedness/Right-to-Know violation and is subject to fines and penalties.**

Tier II Penalties and Fines

There are many fines associated with the incorrect filing or filing of your Tier II forms late. The penalties are assessed based on the nature, extent, gravity, and circumstances of the violation.

The penalties for this can be up to \$50,000, therefore you must ensure that you file your Tier II on time and with all the right information. For example:

- A late submission penalty of between 10 and 30 days can rack up fines up to \$12,000 and a minimum of \$25,000 after a 30-day delay.
- Missing a chemical can have a hefty penalty. For example, a food and beverage company failed to submit their Tier II for one chemical, anhydrous ammonia, for four years. The company had to pay a penalty of \$65,710 for missing that one chemical in their report over the reporting years.

- Failure to submit the report for any chemical at your facility is also subject to penalty. For example, a fertilizer company failed to file a Tier II for 26 hazardous chemicals at their facility for two years and had to pay a penalty of \$62,985.

Generally, fines increase based on the severity of the violation. The EPA provides a [penalty calculation matrix](#) based on the various possible EPCRA violations. It is best to avoid these penalties at all costs to protect your business' finances.