TIER II INSTRUCTIONS

AUTHORITY:
Submission of the Tier II form is required by Title III of SARA of 1986, Public Law 99-499, codified at 42 U.S.C. 11022. The form provides state and local officials with specific information on hazardous chemical inventories stored during the preceding year.

WHO MUST SUBMIT THIS FORM?
The owner or operator of all facilities with storage of hazardous substances on-site to submit a Tier II form annually to the Oklahoma Hazardous Materials Emergency Response Commission (OHMERC), the Local Emergency Planning Committee (LEPC), and the local fire department.

WHAT IS A HAZARDOUS CHEMICAL?
Hazardous chemicals are defined as any substance for which a facility must maintain a Material Safety Data Sheet (MSDS) under the OSHA Hazard Communication Standard. All hazardous chemicals present at the location above threshold levels for any 24-hour period must be reported, unless specifically excluded under Section 311(e). There is a subset of hazardous chemicals known as Extremely Hazardous Substances (EHS). These 260 chemicals have reporting thresholds specifically listed by the EPA.

WHAT QUANTITY OF THE SUBSTANCE MUST BE REPORTED?

1. For the 260 Extremely Hazardous Substances (EHS) designated under Section 302 of this regulation, the reporting threshold is 500 pounds or the Threshold Planning Quantity (TPQ), whichever is lower. You may obtain the list of EHS chemicals and their TPQs from the DEQ.
2. The threshold quantity for all other hazardous chemicals which must have an MSDS is 10,000 pounds.
3. Reporting thresholds for mixtures are addressed below.

A NOTE ABOUT REPORTING MIXTURES:
If a 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 hazardous. For example, a chemical may be in a 5% solution and you determine you have 1000 pounds of this solution on-site. You may either report 1000 pounds (the weight of the entire mixture) or 50 pounds (5% of the weight of the total solution). Either method may be used to determine whether your facility's inventory of that chemical exceeds threshold. However, be advised that once you choose a method for determining chemical inventory for a specific substance, you must use that method for your entire facility's storage of that chemical. For a more detailed explanation of chemical mixture reporting requirements, contact DEQ.

WHAT CHEMICALS ARE EXCLUDED?
Section 311(e) excludes the following:

1. Any substance regulated by the FDA.
2. Any solid in a manufactured item which exposure to the substance does not occur under normal use.
3. Any substance present in the same form and concentration as a product packaged for use by the general public for personal or household use.
4. Any substance to the extent it is used in a research laboratory, hospital, or other medical facility under the direct supervision of a qualified individual.
5. Any substance to the extent it is used in routine agricultural operations by the farmer, or is a fertilizer held for retail sale to the ultimate customer.

WHEN TO SUBMIT:
Tier Two reports are required each year, and the reports must be postmarked no later than March 1.

WHERE TO SUBMIT:
Three reports must be submitted, one to the **OHMERC**, one to the **LEPC**, and one to the **local fire department**. Send one report to:

Oklahoma Hazardous Materials Emergency Response Commission
Monty Elder
Oklahoma Department of Environmental Quality
Customer Services Division
P. O. Box 1677
OKC OK 73101-1677

Names and addresses for LEPC submissions may be obtained from the DEQ. Fire department submissions should be directed to the fire department with jurisdiction over your particular facility.

PENALTIES:
Any facility failing to comply with SARA reporting requirements shall be liable to the United States for a penalty for up to $25,000 for each violation. Each day a violation continues shall constitute a separate violation.

INSTRUCTIONS

A sample Tier II form along with a blank form is included with these instructions. The Tier II form itself consists of four main sections,

1. **Facility Identification**
2. **Emergency Contacts**
3. **Chemical Inventory**
4. **Certification**

SECTION 1--FACILITY IDENTIFICATION

Enter the full name and address for each location where chemicals are present. **Please make sure and include the name of the county where the facility is located and also the facility Standard Industrial Classification (SIC) Code**. If you have any questions regarding your facility's SIC code number, please contact DEQ.

Many facilities will have more than one location for the same owner/operator. For example, a grain elevator may have a main location with pesticides, a site with tanks of ammonia or propane, another site with ammonia nurse tanks, and a shop with aboveground fuel tanks, oils, antifreeze, etc. Another common example is a propane company with storage tanks in several sites. **Each location requires a separate Tier Two submission**. Multiple submissions from the same owner/operator may be sent in one package.

SECTION 2--EMERGENCY CONTACTS

Enter the name, address, and phone number of the facility owner or operator. **This address should be where you would like to receive correspondence from DEQ, LEPCs, or emergency responders**. If you receive your mail at the same address listed in the Facility Information section, you may enter "Same" under the "mail address" entry of this section. Many times the facility location is a street address and the owner/operator address is a Post Office Box, or an office in another state or city.

Below the owner/operator entry are spaces for two emergency contact personnel. These should be persons who can be contacted by emergency responders when necessary. Please include a 24-hour phone number for each emergency contact. You may update this information throughout the year if personnel or phone numbers change.

SECTION 3--CHEMICAL DESCRIPTION, HAZARDS, AMOUNTS, LOCATION

Tier 2 forms require specific information concerning the amounts and locations of hazardous chemicals as defined under the OSHA Hazard Communication Standard. This information is provided to emergency responders to assist them in safely responding to any incidents, and is available to the general public upon request.

Enter the chemical's **Chemical Abstract Service (CAS)** identification number along with the chemical name. If the chemical is an EHS, that should be noted by checking the "EHS" box. In some cases, the chemical name may be a trade name or common name which is different than the official EHS name. For example, "Oleum" is a common name for sulfuric acid, which is a listed EHS. If the substance is an EHS, it should be designated in the MSDS as EHS or a SARA Section 302 chemicals **A list of EHS chemicals with CAS numbers is available from DEQ**.

Information concerning the product's physical and health hazards will also be contained in the MSDS. Please check all appropriate boxes on the Tier II form.

The inventory section asks for three pieces of information, a **Maximum Daily Amount**, an **Average Daily Amount**, and the **Number of Days On-Site**. **One location may have several chemicals to report.**

MAXIMUM DAILY AMOUNT:

Maximum Daily Amount is the largest amount of the chemical on-site for any 24-hour period during the calendar year. This value may be estimated and reported as a code number from the following list.

Range Value	Weight Range in Pounds From:	to:
01	**0**	**99**
02	**100**	**999**
03	**1,000**	**9,999**
04	**10,000**	**99,999**
05	**100,00**	**999,999**
06	**1,000,000**	**9,999,999**
07	**10,000,000**	**99,999,999**
08	**100,000,000**	**999,999,999**
09	**1 billion**	**greater than 1 billion**

Please remember that these values are in pounds, not gallons. A simple rule of thumb for estimating pounds of a liquid is to multiply the number of gallons by 8 lbs/gal, which is the approximate weight of water.

Example 1: You received one large shipment of a solvent mixture this year. The shipment filled five 5,000 gallons storage tanks. You know the mixture contains 10% benzene. So, the Maximum Amount for benzene may be estimated as 25,000 gallons times 8 lbs/gal times 10 % equals to 20,000 pounds (range value code 04).

Example 2. Your facility uses sulfuric acid and stores it in a 50-gallon tank. You have filled the tank three times this year. Looking on the MSDS for sulfuric acid, you find that it weights 15 lbs/gal, and that it is a Section 302 chemical (EHS) with a TPQ of 1,000 pounds. Referring back to the "What Quantity of a Chemical Must Be Reported*" section of these instructions, you find that sulfuric acid stored in amounts over 500 pounds must be reported. Your maximum quantity is 50 gallons times 15 lbs/gal equals 750 pounds. You would enter 02 in the Max. Daily Amount (code) box.*

Example 3. You sell agricultural herbicides each year for about three months. You receive 50 containers of Gramoxone weighing 10 pounds each. Looking on the MSDS, you discover that Gramoxone is a trade name for the chemical "paraquat dichloride" which is a listed Section 302 chemical, with a TPQ of 10 pounds. With 500 pounds on-site at one time, you will enter 02 in the Max. Daily Amount (code) box.

Example 4. Your shop uses acetylene gas, which is kept in 150-pound cylinders. Generally, you have a rotating stock of cylinders, but it is possible for you to have 50 of them on-site at one time. Consulting the MSDS for acetylene, you find no reference to Section 302 or Extremely Hazardous Substance, nor do you find acetylene on the EHS list provided by DEQ. So, you conclude that the reporting threshold is 10,000 pounds. Your greatest amount on-site is 50 times 150 equals 7,500 pounds. You would not be required to report this under Tier 2.

AVERAGE DAILY AMOUNT:

For each hazardous substance on-site, estimate the average 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. Using the above examples, the average daily amount for each could be computed as:

Example 1. You elected to report the benzene component of the solvent mixture as the Max. Amount at 20,000. The original shipment was used up in 315 days. A review of company daily inventory reports showed the sum of the daily volume levels was 4,536,000. Dividing 4,536,00 by 315 days produces an Average Daily Amount of 14,400. Finish the calculation by taking 10% of 14,400 times 8 lbs/gal equals 11,520 pounds (range value code 04)

Example 2. Since you fill your tank three times annually, you may assume 50 gallons of acid lasts 122 days. The daily weight total may be estimated as slightly more than one-half of the maximum, assuming you fill the tank before it is empty, and your usage is steady. In this case, you will never have more than 750 pounds (50 gallons times 15 lbs/gal), and will seldom or never have less 100 pounds (which is less than 6 gallons), so the correct range value code is 02.

Example 3. The substance is present at the facility for about 90 days. For reporting simplicity, you may list the Average Daily Amount as a range value code 02. Assume that for most of the days the Gramoxone is on-site, the amount will exceed 100 pounds and be less than 999 pounds.

Example 4. For demonstration purposes, assume the number of 150-pound acetylene tanks on-site is 500 rather than 50 giving a Maximum Daily Amount of 75,000 pounds. Examination of company records leads to the estimation of the sum of the daily volume levels at 11,680,000. Dividing 11,680,000 pounds by 365 days produces an Average Daily Amount of 32,000 pounds (range value code 4).

NUMBER OF DAYS ON-SITE:

Enter the total number of days the chemical is present at the facility. In most cases, this number is 365.

STORAGE CODES AND LOCATIONS:

This section asks four basic storage questions,

1. What is the type of container in which the substance is stored?
2. Is the product stored under pressure?
3. Is the product held at other than normal temperature?
4. Where at the facility is the chemical located?

Container Types are reported as per this table:

CODE	TYPE OF STORAGE	CODE	TYPE OF STORAGE
A	**Above Ground Tank**	**J**	**Bag**
B	**Below Ground Tank**	**K**	**Box**
C	**Tank Inside Building**	**L**	**Cylinder**
D	**Steel Drum**	**M**	**Glass Bottle**
E	**Plastic/Non-metal Drum**	**N**	**Plastic Bottle**
F	**Can**	**O**	**Tote Bin**
G	**Carboy**	**P**	**Tank Wagon**
H	**Silo**	**Q**	**Rail Car**
I	**Fiber Drum**	**R**	**Other**

Many times the same substance is stored at different locations and in different containers within the facility. The Tier II form has space to report five (5) different on-site storage locations for each chemical.

Pressure is reported as one of three options:

CODE	CONDITION
1	**Ambient Pressure**
2	**Greater than ambient pressure**
3	**Less than ambient pressure**

Temperature is reported as one of four options:

CODE	CONDITION
4	**Ambient temperature**
5	**Greater than ambient temperature**
6	**Less than ambient temperature**
7	**Cryogenic conditions**

The space underneath **Storage Locations** is provided so you may give a very brief description of where in the facility the hazardous substances may be found. Following the examples from above:

Example 1.

Container Type	*Pressure*	*Temperature*	*Storage Locations*
C	*1*	*4*	*Three tanks in west side of building*
A	*1*	*4*	*One tank outside north of main building, one tank southeast of shop*

Example 2.

Container Type	*Pressure*	*Temperature*	*Storage Locations*
A	*1*	*4*	*Tank on north side of office*

***Example** 3.*

Container Type	*Pressure*	*Temperature*	*Storage Locations*
K	*1*	*4*	*Northwest corner of fertilizer Building*

Example 4.

Container Type	*Pressure*	*Temperature*	*Storage Locations*
L	*2*	*4*	*Throughout the entire shop area*

Many facilities elect to augment this information by providing a site map of the facility marking the chemical storage locations. **DEQ strongly supports the inclusion of site maps with the Tier II submission**.

CERTIFICATION:
The owner, operator, or officially designated representative of the facility must certify all information included in the Tier II report is true, accurate, and complete. **Make sure the first page of the Tier II report carries a printed name of the owner, operator, or officially designated representative, along with an original signature and date**.

QUESTIONS:
DEQ can assist with your Tier II filing. Please do not hesitate to call us at **800-869-1400** for assistance. Ask for either **Tom Bergman** or **Monty Elder**. **We are here to help!**