

# EPCRA Toxic Release Inventory (TRI) Reporting Guidance

**RY2014 TRI Reports are Due July 1, 2015**

How do you know if you are required to complete TRI reporting?

Did your facility have 10 or more full time employees in 2014 or were the total hours worked in 2014 by all employees  $\geq$  20,000 hours?

Yes

Is your facility's primary NAICS code included on the EPCRA 313 list? (see resources page)

Yes

Does your facility manufacture, process, or otherwise use EPCRA 313 chemicals or chemical categories?

Yes

In 2014, did your facility exceed any of the reporting thresholds for a EPCRA 313 chemical or chemical category?

Yes

**You are required to submit a RY 2014 TRI Report by July 1st**



Engineering • Construction • EH&S • Energy • Waste

**See page 2 for Guidance on EPCRA 313 Chemicals and Chemical Categories**

**See page 3 for Guidance on Manufacture, Process, Otherwise Use**

**See page 4 for Guidance on Reporting Thresholds**

Still have questions about TRI Reporting, contact Todd Dresser at 1-800-215-8676 or [thdresser@loureiro.com](mailto:thdresser@loureiro.com)

# EPCRA 313 Chemicals

TRI reporting applies to a specific list of toxic chemicals that currently contains 689 chemicals and chemical categories (see resources page for link to current list). The TRI Chemical List can vary from year to year as chemicals are added and deleted. For RY2014, o-nitrotoluene has been added.

The RY2014 TRI Chemical List includes:

**Individually-listed Chemicals** – 594 specific chemicals identified by a unique CAS number such as ammonia, methanol, styrene, toluene

**Chemical Categories** – 31 groups of chemicals with similar compositions such as zinc compounds, copper compounds, diisocyanates

## **When identifying the EPCRA 313 chemicals, be aware of:**

**Persistent Bioaccumulative Toxics (PBTs)** – Group of 6 individually-listed chemicals and 4 chemical categories recognized as posing a greater risk to human health and the environment and therefore have significantly lower reporting thresholds. Lead and lead compounds are the most common PBTs. Examples of where lead can be found include soldering wires, brass and bronze alloys, and marine or aerospace surface coatings.

**Chemicals Qualifiers** – Certain EPCRA 313 chemicals and chemical categories are only subject to TRI reporting if they are in a specific form or associated with a certain activity. Examples include aluminum which is only reportable if it is in the form of fume or dust and isopropyl alcohol is only reportable if it is being manufactured by the strong acid process. Zinc has a qualifier (fume or dust) but zinc compounds do not.



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# Manufacture, Process, and Otherwise Use

Understanding what activities you do with EPCRA 313 chemicals at your facility is a key element in determining if you need to report. TRI covers three categories of **activities**:

**Manufacture** - Means to produce, prepare, compound, or import an EPCRA 313 chemical.

Keep your eye out for EPCRA 313 chemicals which are **coincidentally manufactured** as a byproduct of your activities. A common example is ammonium nitrate, a nitrate compound, produced when you neutralize acidic wastewater containing nitric acid

**Process** - Means the preparation of a listed EPCRA 313 chemical, after its manufacture, for distribution in commerce.

This commonly involves the incorporation of a EPCRA 313 chemical into a product such as the blending together of pigments and solvents to form a paint

**Otherwise Use** - Any use of an EPCRA Section 313 chemical not covered by manufacture or process.

Chemicals otherwise used as a manufacturing aid may be misclassified as processed resulting in underreporting due the lower 10,000 reporting threshold for otherwise use. For example in a painting operation, the purpose of the solvent in the paint is to facilitate the application of the paint to the part. Since the solvent is not intended to remain a part of the finished product, the solvent is being otherwise used.



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# Threshold Determinations

You must submit a TRI report for any EPCRA 313 chemical that you manufactured, processed or otherwise used over 2014 in excess of the following thresholds:

- **Manufacture** – 25,000 pounds per chemical/chemical category
- **Process** – 25,000 pounds per chemical/chemical category
- **Otherwise Use** - 10,000 pounds per chemical/chemical category
- **PBTs** – 100 pounds, 10 pounds, or 0.1 grams (dioxin/dioxin-like compounds only) for all activities depending on the PBT. Lead and lead compounds have a 100-pound threshold unless the lead is contained in specific metal alloys.

## Steps to Making Threshold Determinations

**Step 1** – Identify EPCRA 313 chemicals that are involved in activities throughout your facility over 2014:

- Review processes to identify chemical inputs used and byproducts generated in significant quantities approaching or exceeding 10,000 pounds.
- Beware of EPCRA 313 chemical that are components of mixture or commercial products such as EPCRA 313 metal category compounds within metal alloys that your facility cuts, grinds, etc.
- Identify any activities involving PBTs because of their lower thresholds

**Step 2** – Classify activities involving EPCRA 313 chemicals as manufacture, process, and otherwise use. Check if any **Activity Exemptions** apply (Otherwise Use, Articles, De Minimis).

**Step 3** – Calculate the overall amounts of EPCRA 313 chemicals manufactured, processed, and other wised used over 2014. Use purchase records, inventory data, and process information.

**Step 4** – Compare your 2014 amounts to the applicable activity thresholds. Separate thresholds apply to each of these activities (e.g., only the amount processed applies to the 25,000-pound threshold and only the amount otherwise used applies to the 10,000-pound threshold)

**To help complete your threshold determinations we have put together the attached worksheet that guides you through the process!**

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# TRI Resources

## **TRI-Listed Chemicals (EPCRA 313 Chemicals)**

<http://www2.epa.gov/toxics-release-inventory-tri-program/tri-listed-chemicals>

## **Reporting Year 2014 EPCRA 313 Chemical List**

[http://www2.epa.gov/sites/production/files/2015-01/documents/chemical\\_list\\_for\\_reporting\\_year\\_2014.pdf](http://www2.epa.gov/sites/production/files/2015-01/documents/chemical_list_for_reporting_year_2014.pdf)

## **Is My Facility's Six-Digit NAICS Code a TRI-Covered Industry?**

<http://www2.epa.gov/toxics-release-inventory-tri-program/my-facilitys-six-digit-naics-code-tri-covered-industry>

## **TRI Reporting Forms and Instructions**

<http://www2.epa.gov/toxics-release-inventory-tri-program/tri-reporting-forms-and-instructions>

## **Industry and Chemical Specific Guidance Documents**

<http://www2.epa.gov/toxics-release-inventory-tri-program/guidance-documents-tri-reporting>



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## Example EPCRA TRI Reporting Threshold Determination Worksheet

Facility Name: XZY Corporation

EPCRA 313 Chemical/Chemical Category: Chromium Compounds

Reporting Year: 2014

1	2	3	4	5	6	7	8		
Material Name	Description of Activity Involving Material	Activity Category (Manufacture, Process, or Otherwise Use)	Does the Activity fall under an Exemption? (If yes, list exemption)	Total Weight of Material Involved in Activity during Reporting Year (lbs/year)	EPCRA 313 Chemical Content (% by Weight)	Weight of EPCRA 313 Chemical (lbs) (Column 5 x Column 6)	Amount of EPCRA 313 Chemical by Activity (lbs)		
							Manufactured	Processed	Otherwise Used
Fluid resistant epoxy primer	Spray application of primer to surface of metal parts.	Process	No	6,996 (Comment: 660 gals x 10.6 lbs/gal)	10 (Comment: SDS states 7 to 13% Strontium chromate)	700		700	
Chromium trioxide	Hard chrome electroplating. Chromium trioxide is added to the plating solution.	Process	No	4,500	100	4,500		2,100	
<del>Stainless steel</del>	<del>Cutting, grinding, and buffing of stainless steel to fabricate metal parts</del>	(Comment: Stainless steel contains chromium not chromium compounds. A separate worksheet must be completed for chromium)							

Threshold Determinations			
<b>Totals</b>		2,800 < Threshold, Reporting not required	
<b>For Non-PBT Chemicals/Chemical Categories, compares totals to the following EPCRA 313 reporting thresholds</b>	<b>25,000 lbs</b>	<b>25,000 lbs</b>	<b>10,000 lbs</b>
<b>For PBT Chemicals/Chemical Categories, input appropriate EPCRA 313 reporting thresholds and compare to totals</b>			

## Instructions for EPCRA TRI Reporting Threshold Determination Worksheet

**EPCRA 313 Chemical or Chemical Category:** A worksheet should be completed for each individual EPCRA 313 Chemical or Chemical category identified onsite. If you manufacture, process, or otherwise use both a metal (e.g., chromium) and the related metal category compound (e.g., chromium compounds), separate worksheets should be completed for the metal and the metal category compound.

**Reporting Year:** Calendar year that is being evaluated for TRI reporting, not the year in which you will be submitting the report (e.g. In 2015 you are reporting for 2014).

**Column 1:** On separate rows, input the names of each material containing the EPCRA 313 Chemical/Chemical Category that were involved in activities throughout your facility over the reporting year

**Column 2:** Provide a brief description of the activity involving the material. Focus on information that is important to determining the applicable Activity Category, such as the purpose of the activity. If the same material is used for different activities (e.g., methylene chloride used for both welding plastics and cleaning of metal parts), input the material name twice and the activity descriptions on separate rows.

**Columns 3:** Based on the activity description, input the appropriate Activity Category (e.g., Manufacture, Process, or Otherwise Use). Only one Activity Category can be assigned to each activity.

**Column 4:** Review Activity Exemptions (e.g., Otherwise Use, Articles, De Minimis) to determine if an activity is exempted from TRI reporting. If an exemption applies, you do not have to complete the remainder of the columns for that activity.

**Column 5:** Input the total weight of the material in pounds involved in that activity over the course of the reporting year. Use purchase records, inventory data, and process information

**Column 7:** Multiple Column 5 by Column 6 to get the weight of the EPCRA 313 Chemical/Chemical Category in the material.

**Column 8:** Input the value from Column 7 into the appropriate cell (Manufactured, Processed, or Otherwise Used) based on the Activity Category inputted into Column 3.

**Threshold Determinations:** By Activity Category, sum the amounts of the EPCRA 313 Chemical/Chemical Category from Column 8. For a non-PBT EPCRA 313 Chemical or Chemical Category, compare totals to the corresponding Activity Thresholds. For PBTs, compare totals to PBT-specific thresholds. If any Activity Threshold is exceeded, you are required to report for all Activities involving the EPCRA 313 Chemical/Chemical Category.



## Example EPCRA TRI Reporting Threshold Determination Worksheet

Facility Name: XZY Corporation

EPCRA 313 Chemical/Chemical Category: Toluene

Reporting Year: 2014

1	2	3	4	5	6	7	8		
Material Name	Description of Activity Involving Material	Activity Category (Manufacture, Process, or Otherwise Use)	Does the Activity fall under an Exemption? (If yes, list exemption)	Total Weight of Material Involved in Activity during Reporting Year (lbs/year)	EPCRA 313 Chemical Content (% by Weight)	Weight of EPCRA 313 Chemical (lbs) (Column 5 x Column 6)	Amount of EPCRA 313 Chemical by Activity (lbs)		
							Manufactured	Processed	Otherwise Used
Toluene	Cleaning of equipment and parts	Otherwise Use	No	2,396 (Comment: 6 drums x 55 gals/drum x 7.26 lbs/gal)	100%	2,396			2,396
Toluene	Dissolving rubber into a solution for dip coating	Otherwise Use (Comment: Volatile solvents are otherwise used because they do not become incorporated in the article)	No	8,712 (Comment: 1,200 gals x 7.26 lbs/gal)	100%	8,712			8,712
Contact adhesive	Adhesive used during assembly of air components	Otherwise Use	Yes, adhesive contains 0.5% toluene which is below the de minimis limit of 1%						

Threshold Determinations			
<b>Totals</b>			11,648 >Threshold, Reporting required
<b>For Non-PBT Chemicals/Chemical Categories, compares totals to the following EPCRA 313 reporting thresholds</b>	<b>25,000 lbs</b>	<b>25,000 lbs</b>	<b>10,000 lbs</b>
<b>For PBT Chemicals/Chemical Categories, input appropriate EPCRA 313 reporting thresholds and compare to totals</b>			

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**Column 1:** On separate rows, input the names of each material containing the EPCRA 313 Chemical/Chemical Category that were involved in activities throughout your facility over the reporting year

**Column 2:** Provide a brief description of the activity involving the material. Focus on information that is important to determining the applicable Activity Category, such as the purpose of the activity. If the same material is used for different activities (e.g., methylene chloride used for both welding plastics and cleaning of metal parts), input the material name twice and the activity descriptions on separate rows.

**Columns 3:** Based on the activity description, input the appropriate Activity Category (e.g., Manufacture, Process, or Otherwise Use). Only one Activity Category can be assigned to each activity.

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**Column 5:** Input the total weight of the material in pounds involved in that activity over the course of the reporting year. Use purchase records, inventory data, and process information

**Column 7:** Multiple Column 5 by Column 6 to get the weight of the EPCRA 313 Chemical/Chemical Category in the material.

**Column 8:** Input the value from Column 7 into the appropriate cell (Manufactured, Processed, or Otherwise Used) based on the Activity Category inputted into Column 3.

**Threshold Determinations:** By Activity Category, sum the amounts of the EPCRA 313 Chemical/Chemical Category from Column 8. For a non-PBT EPCRA 313 Chemical or Chemical Category, compare totals to the corresponding Activity Thresholds. For PBTs, compare totals to PBT-specific thresholds. If any Activity Threshold is exceeded, you are required to report for all Activities involving the EPCRA 313 Chemical/Chemical Category.



# Blank EPCRA TRI Reporting Threshold Determination Worksheet



Facility Name: \_\_\_\_\_

EPCRA 313 Chemical/Chemical Category: \_\_\_\_\_

Reporting Year: \_\_\_\_\_

1	2	3	4	5	6	7	8		
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							Manufactured	Processed	Otherwise Used

Threshold Determinations			
Totals			
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